Social Music Interactions and Vocal Music Improvisations in a Serve and Return Music Community

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SOCIAL MUSIC INTERACTIONS AND VOCAL MUSIC IMPROVISATIONS IN A SERVE AND RETURN MUSIC COMMUNITY

by

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To Goltu – Main tumse bahot pyar karti hu.
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ABSTRACT

In this study, I examined how kindergarten students and a music teacher engaged in social music interactions and displayed music characteristics during harmonic improvisation activities. The purpose of this study was (a) to describe social music interactions between kindergarten students and a music teacher and (b) to categorize and to describe kindergarten students’ and a music teacher’s vocal music improvisations during harmonic improvisation activities. The guiding research questions were (a) RQ1: How did kindergarten students and a music teacher engage in social music interactions during harmonic improvisation activities?, (b) RQ2a: What music characteristics did kindergarten students and a music teacher exhibit during harmonic improvisation activities?, and (c) RQ2b: How did kindergarten students and a music teacher exhibit music characteristics during harmonic improvisation activities?

I purposefully selected four kindergarten students and a music teacher as participants in this qualitative design. Although I initially designed this study as an embedded, single-case study, I determined that this single methodological design was insufficient for the emergent needs of the study. Using qualitative bricolage, I combined elements of embedded, multiple-case study methodologies and video-cued ethnography methodologies to investigate the participants’ social music interactions and vocal music improvisations during harmonic improvisation activities. Three early childhood music development specialists participated in individual video-cued interviews to supplement the design with additional perspectives. I collected video- and audio-recorded data,
written observations and reflections, interview data, and I created music transcriptions of the kindergarten students’ and the music teacher’s vocal music improvisations. I used in vivo, process, descriptive, and pattern coding procedures to analyze the data.

I determined five themes regarding social music interactions and vocal music improvisations during harmonic improvisation activities: (a) the participants engaged in a serve and return music community; (b) the music teacher facilitated harmonic improvisation activities using a flexible activity sequence and macro-level and micro-level teaching structures; (c) the music teacher’s vocal music improvisations included singing within the established music context, predictable phrasing, and repetition; (d) the kindergarten students’ vocal music improvisations included singing, chanting, and other sounds that the adult participants perceived as conforming and not conforming to the established music context; and (e) the participants improvised using personal improvisation vocabularies and personal vocal music improvisation characteristics. I wrote vignettes to illuminate five themes within the context of the harmonic improvisation activities. Implications and recommendations for early childhood music development specialists, policymakers, and researchers are discussed.
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Twenty men crossing a bridge,
Into a village,
Are twenty men crossing twenty bridges,
Into twenty villages,
Or one man,
Crossing a single bridge into a village.

– Wallace Stevens, from *Metaphors of a Magnifico*
CHAPTER 1

INTRODUCTION

During a typical school day, the kindergarten class walked through the music room door as their music teacher, Mx. Beetes\(^1\), played the ukulele and sang a familiar greeting song in duple meter and harmonic minor tonality\(^2\). The kindergarten students began to sing along while they formed a standing circle. Mx. Beetes issued the first challenge of the day: “I bet you could come up with a new ending for this song.” After singing the first part of the song, she modeled improvising a new ending. Then, the entire class sang the first part of the song and improvised new endings together. They practiced the song and their improvisations several times before Mx. Beetes asked if anyone wanted to sing an improvised ending alone. Everyone sang the first part of the song together, and individual kindergarten students volunteered to sing their improvised endings alone. Mx. Beetes ended the activity with one final group improvisation before putting away the ukulele, and then the kindergarten students and she settled to the floor.

Without missing a beat, a child looked at Mx. Beetes and rhythmically chanted a short, triple meter rhythm pattern, “buh-buh-buh BAH!” Mx. Beetes locked eyes with the child, repeated his pattern, and morphed it into a sung ostinato in mixolydian tonality and triple meter. The class erupted in freely improvised sounds. Some kindergarten students repeated the ostinato pattern, some kindergarten students created variations on the

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\(^1\) I identify the music teacher using a pseudonym and pronouns that she chose.

\(^2\) See Appendix A for definition of meter, tonality and other terms.
ostinato, and some kindergarten students volunteered their own short music utterances. Their utterances ranged from tuneless whoops and meterless vocables to syncopated rhythm patterns and intricate melodies. Over several minutes, Mx. Beetes responded to the kindergarten students’ vocalizations with her own wordless music vocalizations, weaving a music tapestry that included many tonalities, meters, and styles. After that improvisation activity ended, Mx. Beetes continued to frequently acknowledged the kindergarten students’ vocalizations during other activities.

As the class came to an end, Mx. Beetes brought out the ukulele again and played a short chord progression in duple meter and major tonality. “Listen to my song,” she directed, and she began to improvise a short melody while the kindergarten students listened to her model. Before attempting their own improvisations, the kindergarten students audiated their own melodies while Mx. Beetes played the ukulele. The whole class improvised at the same time, after which some kindergarten students offered to share their individual music ideas.

**Context and Background**

Throughout a typical 30-minute music lesson like the representative lesson described previously, Mx. Beetes provided varied music experiences during which the kindergarten students improvised and demonstrated their music proficiencies through playful social music interactions. Social music interactions comprise myriad ways two or more persons engage in music-making, which include, but are not limited to, listening, turn-taking, and singing or rhythmically chanting together (Arrasmith, 2018; Hubbell, 2016; McNair, 2010; Reynolds et al., 2007; Valerio, 2005; Valerio et al., 1998). Nuanced and interesting information manifests through multiplicity of experiences, including
everyday experiences of young children engaging in social music interactions. During my experiences working with young children as a music development specialist, I have heard countless music vocalizations that I consider beautiful representations of young children’s music development, music understanding, and music improvisation. Even with the aid of recording devices and field notes, however, those music vocalizations remain ephemeral and often difficult to describe in prose. Furthermore, the social music interactions in which the young children and a music teacher engage provide essential context to their performed music. As I constructed this dissertation, I considered the ways qualitative inquiry methods and music transcription may enhance my interpretations and understandings of kindergarten students’ and a music teacher’s social music interactions and vocal music improvisations during harmonic improvisation activities.

I have become increasingly curious about the ways young children engage in music improvisation activities and how researchers convey their analyses of young children’s social music interactions and vocal music improvisations during improvisation activities. As musicians and researchers document, transcribe, describe, and share young children’s social music interactions and vocal music improvisations, what choices do they make? How do those choices influence people’s understandings of young children’s music development, learning, and understanding? How do people interact with, create meaning from, and interpret video- and audio-recorded examples of young children’s social music interactions and vocal music improvisations during music improvisation activities? My interest in young children’s social music interactions during music improvisation activities has only grown throughout my years of experience, and I am drawn toward using my knowledge and skills as both musician and researcher to
document young children’s social music improvisations and social music interactions and to disseminate my findings.

**My Teaching, Academic, and Research Backgrounds**

I identify as an early childhood music development specialist, doctoral candidate, and qualitative researcher. I hold a bachelor’s degree and a master’s degree in music education, and this dissertation fulfills a requirement of a doctoral degree in music education. For over a decade, I have studied and taught early childhood and elementary general music in public, private, and community education settings. Those experiences have influenced my teaching praxis and research interests. I have continued to study music education as a degree-seeking student and as a participant in professional development courses through the Gordon Institute for Music Learning, the American Orff-Schulwerk Association, and the Feierabend Association for Music Education. As a master’s student and doctoral candidate, I enacted several research studies regarding early childhood music development, music perception, guided music play, and music improvisation. My knowledge of early childhood music development and my continued study of qualitative research impact the ways in which I engage in early childhood music education praxis and research.

I firmly believe that children actively engage in social music interactions and intentionally create music. I have experienced situations in which other musicians and researchers have voiced their disbelief that young children create music and use music to interact with others and their surprise that young children produce contextual and intentional music vocalizations. Through my teaching praxis and research, I strive to broaden views on what constitutes music and who produces music. My teaching and
research commitments include rigorous qualitative research, young children’s music development, social music interaction, multiple truths and multiple realities, and disseminating research to a wide array of persons through accessible and comprehensible means.

While studying early childhood music development, I became interested in the ways researchers have represented young children’s social music interactions and vocal music improvisations. I used video and audio recordings to collect data for research projects, to share information with parents regarding their children’s music development, to reflect on my teaching, and to provide examples of young children’s music-making for my students. In this dissertation, social music interactions comprise the nonverbal and verbal interactions that occurred between the kindergarten students and a music teacher that related to the music context and the harmonic music improvisation activities, and vocal music improvisations comprise music sounds, music vocalizations, and music ideas demonstrated by kindergarten children and a music teacher during harmonic improvisation activities. I am interested in the ways visual data, such as video recordings and music transcriptions, and aural data, such as audio recordings, impact persons’ interpretations of social music interactions and vocal music improvisations.

Persons interpret phenomena based on their prior experiences, cultural understandings, and socially situated knowledge, and qualitative research methods are uniquely well-suited to investigating how knowledge impacts interpretation (Patton, 2015; Prasad, 2015). My experiences as a music development specialist, my knowledge of music development research and practices, and my commitment to enhancing young children’s music development have enhanced my ability to interpret the participants’
social music interactions and vocal music improvisations during harmonic improvisation activities.

**Purpose and Guiding Research Questions**

In this study, I examined how kindergarten students and a music teacher engaged in social music interactions and displayed music characteristics during harmonic improvisation activities. The purpose of this study was (a) to describe social music interactions between kindergarten students and a music teacher and (b) to categorize and to describe kindergarten students’ and a music teacher’s vocal music improvisations during harmonic improvisation activities. The guiding research questions are as follows:

- **RQ1**: How did kindergarten students and a music teacher engage in social music interactions during harmonic improvisation activities?
- **RQ2a**: What music characteristics did kindergarten students and a music teacher exhibit during harmonic improvisation activities?
- **RQ2b**: How did kindergarten students and a music teacher exhibit music characteristics during harmonic improvisation activities?

**Issues and Significance**

Although all persons possess music aptitude from birth (Gordon, 2012, 2013), the study of early childhood music education research using qualitative methodologies has existed for fewer than 100 years (Reynolds, 2014). American early childhood music development researchers have called for more qualitative research regarding young children’s music development, music acquisition, and social music interactions (Pellegrino, 2014; Reynolds, 2014; Reynolds & Burton, 2014; Reynolds et al, 2007; Valerio, 2005). Gordon (2012, 2013) asserted that although music is a universal
phenomenon, music is not a universal language, and Pellegrino (2014) posited, “how each person receives and interprets music is not universal” (p. 311). Early childhood music development specialists and researchers may augment their understanding of young children’s music development by enacting, reading, and applying qualitative research findings and implications to their teaching and research. In this dissertation, I investigate the ways kindergarten students and a music teacher engaged in social music interactions and performed vocal music improvisations during harmonic improvisation activities.

By documenting young children’s music development and music experiences, early childhood music development specialists may augment their music facilitation efficacy and impact their students’ music development and music skills acquisition (Valerio, 2005). Pellegrino (2014) defined process-of-music-making data as “rehearsals, lessons, the act of composing a new piece of music, and any other in-the-moment work of being a musician” (p. 313). The focus of process-of-music-making data comprises the actions taken by participants, rather than the end product of music-making. Reynolds (2014) similarly recommended qualitative researchers enact research in dynamic contexts that represent multiple understandings of music knowledge and multiple constructions of music experiences. By gathering process-of-music-making data in a dynamic context, I illuminate the developing social music environment and vocal music improvisations demonstrated by kindergarten students and a music teacher. Additionally, I interviewed Mx. Beetes and three early childhood music development specialists to gain meanings-of-music-making data (Pellegrino, 2014) regarding their understandings of those developing social music interactions and vocal music improvisations. By enacting this qualitative
research study, I add to the body of knowledge regarding social music interactions and vocal music improvisations demonstrated by kindergarten students and a music teacher during harmonic improvisation activities.

**Limitations**

I document the dissertation’s historical research context (Chapter 1 and Chapter 2), my methodological decisions (Chapter 3), and my findings (Chapter 4 and Chapter 5) extensively throughout this document; however, this dissertation’s scope is limited by its design, the physical setting and participants, and my positionality as an early childhood music development specialist and researcher. I do not seek to represent universal harmonic improvisation experiences of American early childhood music development specialists and their students. I enacted this research at one physical location and with one set of participants who had developed their own unique social music culture. Although some aspects of their unique social music culture may be applicable to other people’s social music interactions in early childhood music development settings, the entirety of this dissertation is not generalizable to the population of American early childhood music development specialists and their students. To bolster the dissertation’s design and to support my findings, I represent the understandings and perspectives expressed by three early childhood music development specialists through video-cued ethnography (Adair & Kurban, 2019b; Tobin, 2019; Tobin & Hsueh, 2007). I detail those early childhood music development specialists’ roles in Chapter 3.

Patton (2015) wrote, “Determining substantive significance requires judgment, which makes it personal” (p. 74). I acknowledge that my positionality, early childhood music development experiences, and research experiences permeate this dissertation and
influenced my interpretations of the data. If another early childhood music development researcher had enacted this study, they may have drawn different conclusions regarding the social music interactions and vocal music improvisations of the kindergarten students and music teacher. While reviewing this dissertation, readers may debate details of my design, findings, and implications. Nonetheless, I have thoroughly documented how my experiences have impacted my interpretations, my decisions regarding emergent design decisions and qualitative bricolage, my analysis and interpretation of the data, and how the findings reflected the participants’ and my understandings of social music interactions and vocal music improvisations during harmonic improvisation activities.

Dissertation Layout

This dissertation comprises six chapters. In Chapter 1, I introduce the reader to the research study. Chapter 2 comprises a literature review of social music interactions and improvisation in early childhood music development settings, and Chapter 3 comprises a detailed account of the study’s qualitative methodologies, emergent design, setting and participants, data collection, data analysis, and credibility. I discuss my findings in Chapter 4 and Chapter 5. I describe five themes regarding social music interactions and vocal music improvisations demonstrated by the kindergarten students and a music teacher during harmonic vocal music activities in Chapter 4. In Chapter 5, I utilize three vignettes to elucidate my findings within the context of those harmonic vocal music activities. I conclude this dissertation in Chapter 6 by detailing implications for early childhood music development specialists, policymakers, and researchers; recommending research agendas for myself and other early childhood music development researchers; and concluding with a brief reflection on this dissertation.
CHAPTER 2
LITERATURE REVIEW

Children’s music improvisation experiences may set the foundation for their music creativity, ownership of music knowledge, and acquisition of music skills (Hubbell, 2016; McNair, 2010; Reynolds & Burton, 2017; Siljamäki & Kanellopoulos, 2019). The National Association for Music Education (2019) has highlighted creating music, performing music, and responding to music as the three integral “Artistic Processes” required for 21st century musicians, and the organization’s current standards include an emphasis on improvisation. Although researchers have investigated melodic improvisation skill levels (Brophy, 2002, 2005; Kratus, 1991,1995), children’s instrumental improvisations (Beegle, 2010; Brophy, 2005; Paananen, 2007; Wall, 2013), and children’s perceptions of their own vocal and instrumental improvisations (Coulson & Burke, 2013; Driscoll, 2014), few researchers have investigated how young children engage in vocal music improvisation activities and the music characteristics of their vocal improvisations. By examining young children’s improvisations and improvisation experiences, researchers have contributed to knowledge regarding children’s music development; however, little research exists regarding young children’s social music interactions and vocal music improvisations during harmonic improvisation activities.

Improvisation Opportunities as Learning Opportunities

Young children vocally improvise with others to learn how to communicate using language and using music (Albert et al., 2016; Gordon, 2012, 2013; Reynolds & Burton,
2017; Reynolds et al., 2007). As children’s speech and language abilities develop, they babble by producing speech-like vowel sounds and consonant-vowel sounds (Albert et al., 2016). Gordon (2013) similarly labeled children’s nascent music sounds as music babble. As young children interact with more knowledgeable others (Bodrova & Leong, 2007), their speech develops from babble to increasingly sophisticated and purposeful speech vocalizations (Albert et al., 2016; Kuhl, 2004). Similarly, as young children engage in social music interactions, their music vocalizations may become increasingly related to the extant music context (McNair, 2010; Reynolds et al., 2007). Quality communication between children and adults involves supporting children’s “holistic development” (Reynolds & Burton, 2017, p. 145), frequent interaction, sensitivity to children’s needs, and exchanges that include numerous and unique words and music sounds. Those quality communications set the foundation for cognitive skills, which relate to academic success, and non-cognitive skills, which relate to emotional regulation and social interaction (Kuhl, 2004; Reynolds & Burton, 2017). Adults frequently provide language and music scaffolding by repeating their children’s improvised vocalizations, engaging their children in improvised babble, and communicating with their children in a variety of speech and music contexts and settings. The learning environment and its inherent social constraints may be pivotal to future social and academic learning and to the development of young children’s language and music vocabularies (Kuhl, 2004).

Researchers have argued that children learn music by vocalizing music with caretakers, music teachers, and other children (Gordon, 2012, 2013; Reynolds & Burton, 2017; Reynolds et al., 2007). As children’s music abilities develop, they produce increasingly sophisticated and purposeful music vocalizations. Children’s music babble
may lack obvious music syntax and seem unrelated to the established music context (Gordon, 2013). Gordon (2013) described tonal music babble as using speech-like sound quality without relation to the music context while attempting to sing, and he described rhythm music babble as creating sounds and movements with an inconsistent tempo and without relation to the music context while attempting to rhythmically chant. Music babble may become increasingly syntactic and contextual if children have ample opportunity to independently practice music babbling and to engage in social music interactions (McNair, 2010; Reynolds & Burton, 2017).

Adults may begin to recognize young children’s exit from music babble by their increasing ability to provide tonal vocal responses with singing-voice quality, to rhythmically chant with a consistent tempo, and to relate their vocalizations and their movements to the established music context (Gordon, 2012, 2013). Children require exposure to and participation in music activities and social music interactions to exit music babble and to develop their audiation, which is the ability to think music (Gordon, 2012, 2013). To augment children’s music understanding and development, adults may use improvisatory responses to return music vocalizations and to engage children within the music context (Reynolds & Burton, 2017). As young children learn to audiate, they enhance their abilities to create and to improvise vocal music on their own and with others (Gordon, 2012, 2013).

**Playful Social Music Interactions**

Early childhood music development specialists have utilized playful social music interactions to enhance young children’s music understanding and music skill acquisition (Arrasmith, 2018; Burton, 2017; Hubbell, 2016; McNair, 2010; Reynolds & Burton,
2017; Reynolds et al., 2007; Valerio et al., 1998). As more knowledgeable persons (Bodrova & Leong, 2007; Vygotsky, 1976), music teachers infuse the music environment with a variety of music contexts, music content, and playful music activities. Researchers and practitioners consider play a developmentally appropriate aspect of early childhood music education (Reynolds & Burton, 2017; Reynolds et al., 2007; Valerio et al., 1998). Hornbach (2007) described a child-centered environment as one in which children’s behaviors initiated social music interactions with a music teacher. With specific music learning objectives and music contexts in mind, music teachers playfully engage with children to develop their music skill acquisition and music understanding. By attending to young children’s preferred, developmentally appropriate play, music teachers may encourage young children’s willingness to engage in playful social music interactions and to develop their personal music skills and music understandings (Arrasmith, 2018; Hornbach, 2007).

The ways young children participate in music learning processes may reveal the depth of their music skill acquisition and music understanding (McCusker, 2007). During social music interactions, young children play with music teachers and their peers by listening to music with and without words in a variety of meters and tonalities, moving, imitating tonal patterns and rhythm patterns, and exploring non-contextual and contextual music sounds (Hornbach, 2007; Reynolds et al., 2007; Valerio et al. 1998). Purposeful silence plays an important role in encouraging young children’s music vocalizations (Hicks, 1993; Hornbach, 2007; Hubbell, 2016; McNair, 2010; Reardon, 2015; Reynolds, 1995; Reynolds et al., 2007; Valerio et al., 1998; Willing, 2009). Music teachers may leave a purposeful silence at the final macrobeat of a rhythm chant, at the final notes of a
song, or after performing a tonal pattern or rhythm pattern to elicit music responses (Hicks, 1993; Hornbach, 2007; Reardon, 2015). During playful social music interactions, young children may fill those silences with music vocalizations that may or may not relate to the established music context; however, these responses provide valuable insight into young children’s music development and may enhance their music self-efficacy. By engaging in playful social music interactions, young children and music teachers establish safe environments in which they comfortably and spontaneously participate in music conversations (Burton, 2017; Hornbach, 2007; Hubbell, 2016; Reardon, 2015; Reynolds & Burton, 2017; Valerio et al., 1998).

Playfulness, such as pretending to sleep or manipulating objects and toys, may encourage joint music attention during social music interactions (McNair, 2010). Joint music attention, as defined by McNair (2010), comprises reciprocal social music interactions during which adults engage young children in music conversation, give meaning to young children’s developing music sounds, and increase young children’s music acquisition. McNair (2010) identified the cultural domains of joint music attention as shared music focus, shared music interaction, and shared music understanding. Young children and music teachers engaged in joint music attention demonstrate shared music focus by listening, watching, and moving, and they demonstrate shared music understanding by engaging in reciprocal music-making, using each other’s music contexts, and repeating each other’s music sounds.

Bartel and Cameron (2007) described intentional engagement as young children’s choices to attend to and to engage playfully in music learning. The researchers argued that the pedagogical-emotional context fostered by music teachers comprised the most
impactful aspect of young children’s music learning environments. Positive emotional relationships between young children and music teachers may encourage young children to choose how they playfully create sounds, to acquire music skills based on their own readinesses, and to develop music self-efficacy. Music teachers may enhance young children’s attention to the music environment and willingness to participate in playful music-making by establishing routines through repetition (Hubbell, 2016; McNair, 2010). Through engagement in music routines, young children and music teachers may develop shared music understanding regarding music sounds, movements, and playful scenarios. As young children participate in music routines, they may use spoken language to request specific music repertoire and playful scenarios (Hubbell, 2016). By repeating music activities and establishing routines, young children and music teachers establish social and music-making histories (McNair, 2010).

Arrasmith (2018) investigated guided music play with 2-year-old children during playful early childhood music development sessions led by the researcher. According to Weisberg et al. (2016), guided play incorporates elements of child-directed free play, teacher-guided mentorship, and specific learning goals. In an early childhood music setting, Arrasmith (2018) found that the 2-year-old children and she fluidly adopted roles, engaged in play scenarios and playful activities, and used songs and rhythm chants in a variety of meters and tonalities to interact with each other during guided music play. Acting at various times as observers, initiators, sustainers, and modifiers, the 2-year-old children and the researcher engaged in playful music activities that emerged from the 2-year-old children’s social development stages, music development stages, and interests. They engaged in rhythm pattern and tonal pattern imitation and improvisation while
pretending to drive cars, to take naps, and to stir soup. The children guided the playful scenarios, and the researcher established the music content, music context, and music learning goals.

Bartel and Cameron (2007) suggested music teachers model music behaviors to communicate expectations and reinforce young children’s attempts to approximate their models through positive feedback. Young children may develop music skills independently when they have ample opportunities to engage in playful music-making with nurturing guidance from music teachers (Arrasmith, 2018; Bartel & Cameron, 2007). Furthermore, music teachers who silence young children when they exhibit music sounds may hinder young children’s willingness to engage in music-making and abilities to develop their music skill acquisition and music understanding (Bartel & Cameron, 2007).

**Characteristics of Music Improvisation**

As young children’s music experiences accumulate through continued exposure to playful social music interactions, their music abilities and music understandings may continue to develop (Brophy, 2005; Gordon, 2012, 2013; McNair, 2010). Engaging young children in social music interactions while singing songs, chanting rhythm chants, moving to live and recorded music, and vocally improvising may further augment their music abilities. Bartel and Cameron (2007) argued,

Beyond creating sound, which can easily become subverted by a teacher’s cultural understandings and desire to show off achievement into merely ‘learning songs,’ children need to learn that the elements of music themselves can be manipulated, that it is permissible to manipulate these dimensions of music. (p. 76)
By learning through music creation and music improvisation, young children may deepen their music understandings and may use music to express themselves and to communicate with others (Bartel & Cameron, 2007).

Researchers have regarded music improvisation as a valuable means of enhancing children’s music development (Gordon, 2012, 2013; Kratus, 1991, 1995; Reynolds & Burton, 2017; Reynolds et al., 2007; Valerio et al., 2006). Characteristics of music improvisation include spontaneous creation of new music, creative intention, purposeful sound production, structure, and the inability to revise sounds previously produced (Kratus, 1995; Reese, 2007). Music improvisation categories include free improvisation, tonal improvisation, rhythm improvisation, melodic improvisation, and functional harmonic improvisation (Driscoll, 2014; Reese, 2007). Young children’s music improvisations include convergent thinking processes, which comprise the improviser’s ability to create within constraints such as tonality and meter, and divergent thinking processes, which comprise the “fluency, originality, and flexibility” (Lewis & Lovatt, p. 48) of their music improvisations (Kratus, 1995; Lewis & Lovatt, 2013; Reese, 2007).

According to Kratus (1995), music improvisers spontaneously and purposefully create sound within constraints, and expert music improvisers do so without thought to the processes involved in creating sound. The researcher delineated seven sequential levels of music improvisation. Those seven levels comprised (1) exploration, (2) process-oriented improvisation, (3) product-oriented improvisation, (4) fluid improvisation, (5) structural improvisation, (6) stylistic improvisation, and (7) personal improvisation (Kratus, 1991, 1995). Music improvisation’s ultimate realization, according to Kratus (1991, 1995), comprised creating a new music improvisation style unique to the
individual music improviser. The researcher postulated that music teachers need first to recognize children’s demonstrated music improvisation levels and then to create music improvisation activities and opportunities to scaffold children to subsequent music improvisation levels.

Adults may find themselves evaluating children’s music improvisations based on the inclusion or absence of normative, Western music conventions (Custodero, 2007). A deficit model “in which focus is on the normatively absent rather than the expressively present” (Custodero, 2007, p. 78) may inhibit adults’ abilities to understand children’s music improvisations as intentional, nuanced expressions of their social music environments, music self-expression, and music understandings. The final realization of Kratus’ (1991, 1995) seven levels of music improvisation comprises the creation of a new and unique music improvisation style. Adults may consider young children’s music improvisations insignificant or unmusical as compared to music improvisations of professional jazz musicians who have developed personal improvisation styles. By considering music improvisation as developmental and formative rather than sequential and hierarchical, music teachers may develop music improvisation activities that both enhance young children’s music improvisation development and honor the music improvisations that young children of all music improvisation abilities create. Custodero (2007) proposed that adults recognize children’s music improvisations as intentionally created and as responses to their social music environments.

Because young children create music in response to their music environments, the music skills they develop may also influence their music improvisation skills (Guilbault, 2009). Researchers have disputed the relationship between age and music improvisation
ability, or the lack thereof (Brophy, 2005; Gordon, 2012, 2013; Guilbault, 2009). Some researchers have contended that 10- to 12-year-old children include more motivic development, more complicated rhythms, and more structured phrasing in their music improvisations than do 5- to 7-year-old children (Brophy, 2005; Paananen, 2007). Other researchers, however, have argued that music improvisation ability relates more closely to young children’s stages of music development than their chronological ages (Custodero, 2007; Gordon, 2012, 2013; Guilbault, 2009). Young children with myriad music experiences and substantial music understanding may create more complex, high-level music improvisations as compared to young children with limited music experiences and music understanding (Gordon, 2012, 2013; Reynolds & Burton, 2017).

Music understanding may necessitate audiation (Burton, 2017; Gordon, 2012, 2013; Kratus, 2005; Reynolds et al., 2007). Gordon (2013) posited that audiation, likened to music thought, is an integral aspect of syntactical, contextual music improvisation. While thinking, speakers predict speech sounds and meaning before speaking; while audiating, music improvisers predict music sounds and music meaning before improvising. Kratus (1991) speculated that audiation may emerge during the process-oriented improvisation stage, which comprises sound combination exploration, emergent music patterns, and minimal organization or structure. At that level, music improvisers audiate patterns and begin to create pattern-dominated improvisations. Without audiation, a music improvisation may be “the result of chance factors or motor movement in response to visual cues,” rather than the intentionally produced music sounds and music patterns of process-oriented improvisation (Kratus, 1995, p. 28). By implementing a variety of music improvisation activities designed to enhance audiation and music
improvisation performance, adults may help young children gain ownership over their music experiences and exercise both convergent and divergent music improvisation skills.

**Music Improvisation Experiences**

Siljamäki and Kanellopoulos (2019) envisioned music improvisation as a means of empowerment, social development, music learning, preserving global music cultures and traditions, and enhancing music creativity. As music teachers provide a variety of music contexts and music-making opportunities, young children respond musically to the context and content of their music environments (Waters, 2015). Young children may demonstrate their music development through creative music improvisations, and music teachers may respond to young children’s suggestions, interests, and needs to bridge them into the next stage of music development (Gordon, 2012, 2013).

In a qualitative action research study regarding fifth grade students’ group music improvisations during band instruction, Wall (2013) found that the students’ personal music preferences, their decision-making capabilities, and successful collaboration influenced their music improvisations. The students explored new music ideas, practiced creating unified music ideas, and expressed their emotions while improvising. In an examination of fifth-grade students’ group instrumental improvisations, Beegle (2010) provided three improvisation prompts: a painting, a poem, and a recorded music excerpt. While preparing to perform their group improvisations, the students engaged in non-sequential music and social processes that included assigning roles to each student, exploring the instruments’ and objects’ sounds, exploring music ideas, rehearsing multiple times as a group, and communicating with others. Beegle interviewed the
students after their performances, and the students noted that the painting prompt provided the least structure and the most freedom and that the composed music prompt provided the most structure and the least freedom. Wall (2013) and Beegle (2010) found that fifth-grade students both utilized existing social structures and music structures and established new social structures and music structures to prepare and to perform group improvisations.

Researchers have introduced music structures to music improvisation experiences by presenting young children with pentatonic instruments, limiting the improvisation instruments’ range to a diatonic scale, or providing an accompaniment to young children’s music improvisations (Brophy, 2005; Guilbault, 2009; Paananen, 2007). Coulson and Burke (2013) reported that fourth-grade students perceived some music improvisation structures or guidelines as easier to follow than others. Creating a variety of music improvisation experiences with differing music structures and guidelines may provide young children opportunities to perform improvisations that demonstrate their current music improvisation proficiencies and may provide scaffolding for young children to perform increasingly sophisticated music improvisations.

By engaging in music improvisation experiences, young children may develop their music improvisation skills and progress through stages of music improvisation development (Brophy, 2005; Kratus, 1991; Paananen, 2007). Brophy (2005) found that 9-year-old children used less melodic repetition, used more rhythmic repetition, and demonstrated more music organization than did 7-year-old children while improvising melodies on an alto xylophone configured in the C-pentatonic scale. Similarly, Paananen (2007) noted that 6- and 7-year-old children focused on either melodic-rhythmic
development or music structure, whereas 10- and 11-year-old children integrated the two music improvisation aspects while performing melodic improvisations on a synthesizer configured in the C-diatonic scale. As their music improvisation skills develop, young children may self-impose music structures on their music improvisations, such as improvising for a predetermined number of beats, repeating rhythm motives, or utilizing a pentatonic scale (Wall, 2013).

Young children’s familiarities with music structures may influence their music improvisation abilities. Guilbault (2009) quantitatively analyzed the vocal music improvisations of 6- to 11-year-old children. One group of children received a treatment of music instruction that included harmonic accompaniment, and another group received a control of music instruction without harmonic accompaniment. The harmonic accompaniments were performed vocally, instrumentally, or by recordings and performed by the researcher and the children. At the end of the treatment period, the young children completed a performance test during which they improvised an ending to an unfamiliar song without harmonic accompaniment in major tonality and duple meter. The young children who received music instruction with harmonic accompaniment performed vocal music improvisations with obvious harmonic changes, and those who received music instruction without harmonic accompaniment performed vocal music improvisations without obvious harmonic changes. In contrast to Brophy’s (2005) and Paananen’s (2007) findings, Guilbault (2009) found no relationship between age and improvisation ability. Guilbault hypothesized that, in those instrumental melodic improvisation studies, children’s abilities to play music instruments may have influenced their music improvisation abilities.
Need for This Study

Although researchers have used qualitative methods and quantitative methods to investigate instrumental music improvisation (Beegle, 2010; Brophy, 2005; Paananen, 2007; Wall, 2013), music improvisation development (Guilbault, 2009; Kratus, 1991, 1995; Paananen, 2007), types of music improvisation (Reese, 2007), and playful social music interactions that occur during early childhood music development sessions (Arrasmith, 2018; Burton, 2017; Hornbach, 2007; Hubbell, 2016; McNair, 2010; Reynolds et al., 2007), researchers have not specifically investigated the social music interactions and vocal music improvisations demonstrated by kindergarten students and a music teacher during harmonic improvisation activities using qualitative bricolage (Kincheloe, 2001; Rogers, 2012). Guilbault (2009) studied the effect of harmonic accompaniment on kindergarten through sixth grade students’ abilities to perform melodic improvisations. The researcher enacted a quantitative study and rated the students’ abilities to perform melodic improvisations with implied harmonic functions. Whereas Guilbault (2009) engaged in quantitative product-of-music-making data collection and analysis, I engaged in qualitative process-of-music-making data collection to illuminate the participants’ social music interactions and vocal music improvisations during dynamic music contexts (Pellegrino, 2014; Valerio, 2005).
CHAPTER 3

METHODOLOGIES AND METHODS

As stated in Chapter 1, my interests in the nuances of early childhood music development, social music interactions, and vocal music improvisations informed this study. To investigate the nuances of social music interactions during harmonic improvisation activities, I chose a qualitative bricolage approach with elements of case study and video-cued ethnography (Adair & Kurban, 2019a, 2019b; Kincheloe, 2001; Patton, 2015; Pratt et al., 2020; Rogers, 2012; Tobin, 2019; Tobin & Hseuh, 2007; Yin, 2018). Through qualitative bricolage, I determined which methodological aspects contributed to my deep understandings regarding how the participants engaged in social music interactions during harmonic improvisation activities and regarding the participants’ demonstrated vocal music improvisation characteristics. With the intention of communicating my findings with early childhood music development specialists and researchers, I used case study methods to investigate the real-world phenomenon kindergarten students’ and a music teacher’s harmonic improvisation experiences (Yin, 2018) and video-cued ethnography methods to expand understanding of their social music interactions and vocal music improvisations beyond my own perceptions (Tobin, 2019). I crafted my guiding research questions, design, and data collection using case study methods. Through video-cued ethnography, I used interview participants’ language and understandings to engage in emic analysis of social music interactions and vocal music improvisations during harmonic improvisation activities (Patton, 2015). I also
engaged in etic analysis of the participants’ vocal music improvisations using a predetermined list of provisional codes (Patton, 2015). Table 3.1 comprises a chart outlining the study’s research questions, units of analysis, data collection, and coding procedures. Appendix B comprises confirmation from the Institutional Review Board that this research study does not constitute human subjects research.

Design

Descriptive Case Study

I initially chose a descriptive case study framework to investigate phenomena (i.e., social music interactions and vocal music improvisations) that occurred in a real-world setting (Yin, 2018). In this embedded multiple-case design, the context comprised early childhood music classes during which kindergarten students and a music teacher engaged in a variety of vocal music improvisation activities. The cases comprised (a) a social music interaction case with the participants as embedded units of analysis and (b) music characteristic cases for each of the four kindergarten student participants and the music teacher participant with the participant and the interviewed participants as embedded units of analysis (Figure 3.1). In case study research, phenomena and the overarching context function as inseparable aspects of the real-world setting and become relevant features of the case (Yin, 2018). I purposefully chose to investigate social music interactions and vocal music improvisations that occurred in a vocal music improvisation-rich setting. The music teacher consistently facilitated social music interactions during playful music activities, and the kindergarten students and music teacher engaged in vocal music improvisation activities during each music class.
I began to define the case as the social music interactions and vocal music improvisations that occurred among kindergarten students and a music teacher. Yin (2018) defined case boundaries as the “distinction between the conditions that fall within as opposed to outside of the case in a case study–such as the time period, social groups, organizations, geographic locations, or other relevant features–understanding that the boundaries can be fuzzy” (p. 286). The descriptive case comprised a bounded system in which the kindergarten students were similarly aged, the kindergarten students and music teacher had a shared music history, and the kindergarten students and music teacher engaged in playful social music interactions during semi-weekly music classes (Glesne, 2011; Yin, 2018). I used purposeful sampling to choose information-rich cases that provided insight into the participants’ social music interactions and vocal music improvisations during harmonic improvisation activities (Patton, 2015).

I bounded this case to a kindergarten music class setting in which the music teacher enacted playful, social music improvisation activities to enhance the kindergarten students’ social music interactions and vocal music improvisations, and I focused my investigation within the boundaries of a music learning theory-based curriculum (Gordon, 2012, 2013; Valerio et al., 1998). The music teacher had extensive knowledge of music learning theory and used music learning theory approaches while teaching, which created an ideal music setting for this study. Because the kindergarten students and music teacher engaged in many types of vocal music improvisation, I further bounded the case within harmonic improvisation activities (Reese, 2007). The embedded units of analysis comprised the four purposefully selected kindergarten student participants and the music teacher participant (Patton, 2015; Yin, 2018). I gathered data from each unit of analysis to enhance my understanding of the class’ vocal music improvisation experiences, social
music interactions, and music characteristics of the four kindergarten student participants’ vocal music improvisations during harmonic improvisation activities (Yin, 2018).

**Evolution of the Study from Case Study to Qualitative Bricolage**

While designing and implementing this study, my understandings of social music interactions and vocal music improvisations arose from my understandings of social music interactions, my personal music history, my teaching philosophy, and my aural perceptions of vocal music sounds. I began the study as a descriptive, embedded single-case study of the social music interactions and vocal music improvisations displayed by kindergarten students and a music teacher during music classes over an academic semester. As I engaged in data collection, I considered ways to fill gaps in the data and to broaden my findings beyond my subjective understandings. Gaps in data naturally occurred due to the music teacher’s spontaneous and flexible teaching nature, intermittent technology issues, and several kindergarten student participants’ absences and dynamic participation levels. Furthermore, the setting shut down during the COVID-19 pandemic, which necessitated truncating data collection and changing the study’s scope from the participants’ social music interactions and vocal music improvisation characteristics during all vocal music improvisation activities to an investigation of the participants’ social music interactions and vocal music improvisations during harmonic improvisation activities. As I analyzed the data, I recognized that the single-case design was insufficient to answer RQ2a regarding the music characteristics that the four kindergarten student participants and music teacher participant exhibited during harmonic improvisation activities. I altered my design to a multiple-case design to account for each participant’s
individual music characteristics rather than the participants’ composite music characteristics (Yin, 2018). Although I determined the collected data to be vivid representations of the phenomena, I recognized the need for additional perspectives regarding interpretations of participants’ social music interactions and vocal music improvisations (Adair & Kurban, 2019a, 2019b; Kincheloe, 2001; Rogers, 2012; Tobin, 2019).

Researchers may begin a project with one framework, such as case study, and realize that additional methodologies and frameworks may contribute to multi-layered, nuanced understanding of the phenomena (Kincheloe, 2001; Rogers, 2012; Pratt et al., 2020). In choosing qualitative bricolage, I needed to deeply examine my assumptions, to respond to the evolving nature of research, and to justify my methodological choices (Pratt et al., 2020). I gained the ability to customize my methodology, methods, and analysis and to support my findings with multiple perspectives. I designed a qualitative research project responsive to the setting, the participants’ needs, and my commitment to thoroughly gathering in-depth data. In essence, I used qualitative bricolage to quilt a multi-layered work that rendered the participants’ particular social music interactions and vocal music improvisations, their uniquely constructed harmonic improvisation activities, and interpretations thereof drawn from several early childhood music development specialists’ perspectives. The following subheadings comprise the methodological frameworks I selected from qualitative bricolage (Kincheloe, 2001; Rogers, 2012), case study (Yin, 2018), and video-cued ethnography (Tobin, 2019).
**Qualitative Bricolage**

The term *bricolage* emerged from a French crafting tradition in which artists constructed new and creative works from available scrap material (Kincheloe, 2001; Rogers, 2012). In qualitative research, bricolage developed into a practice of “eclecticism, emergent design, flexibility and plurality” (Rogers, 2012, p. 1). In a single methodological design, a researcher may find herself limited to that methodology’s theories, methods, and procedures and may have little ability to adjust her design as the study unfolds. In lieu of strictly adhering to one methodological framework, a researcher engaged in qualitative bricolage intentionally modifies her methodological approach based on the flexibility of the study’s design, emerging gaps in data, and the need to include multiple perspectives (Rogers, 2012).

Qualitative bricolage “highlights the relationship between a researcher’s ways of seeing and the social location of his or her personal history” (Kincheloe, 2005, p. 324), and I purposefully engaged in qualitative bricolage to create meaning through methodological flexibility and multiple perspectives regarding the social contexts of the data and of the participants’ understandings. By embracing qualitative bricolage, I have shifted my perspective from researcher to *bricoleur* and embraced the complexity and multiplicity of my design, analysis, and findings (Kincheloe, 2005). Rather than making all design and analysis decisions before engaging in the research process, bricoleurs use their instincts to build their design while collecting and analyzing data (Rogers, 2012). They embrace the intricacy of understanding and do not seek to separate their lived experiences from the inquiry process. No universal truth exists, and researchers use
qualitative bricolage methods to search for alternative truths, multiple perspectives, and complexity (Rogers, 2012; Pratt et al., 2020).

**Disadvantages and Advantages of Qualitative Bricolage**

Berry (2011) cautioned bricoleurs to choose their methodologies purposefully to avoid “a superficial or redundant construction of knowledge” (p. 281). Although I have outlined my approach to this dissertation in detail, others may disagree with my chosen methodologies, and I may have further enhanced my findings by engaging in additional methodological frameworks. Alternate means of investigation always exist; however, I deliberately chose case study and video-cued ethnography (a) to thoroughly investigate the phenomena of social music interactions and vocal music improvisations during harmonic improvisation activities; (b) to include multiple perspectives derived from myself, the music teacher participant, and the three early childhood music development specialist participants; and (c) to describe the complex nature of these multiple perspectives regarding the phenomena.

Limitations of qualitative bricolage include (a) the broad and deep methodological knowledge required by both researcher and readers, (b) the need for extensive documentation of methodological choices, and (c) conveying understandable information regarding the phenomena of interest while engaging in complex methodological pluralism (Pratt et al., 2020). Researchers may use a single methodology to support their methods, analysis, and finding because of the methodology’s extensive history, theoretical underpinnings, and procedures (Pratt et al., 2020). A researcher enacting a case study may draw on myriad textbooks and articles with a variety of authors and in many fields from which to justify data collection methods, analytic decisions, and
interpretations of findings. Pratt et al. (2020) argued that relying on a single methodology and its standard practices, which they termed a *methodological template*, may lead researchers to oversimplify their methods and analysis. As I began constructing this dissertation, I intended to follow case study methodology; however, as I began to analyze the video- and audio-recordings, I determined that I would not achieve triangulation (Patton, 2015; Yin, 2018) using solely my own interpretation of the nuanced, layered data. I realized that my research questions necessitated multiple perspectives, supplementary data sources, and additional methodological considerations.

Bricoleurs use whatever tools and materials they have at hand to craft their work (Kincheloe, 2001; Rogers, 2012). My data at hand comprised the video- and audio-recorded data of the music classes I observed, my field notes, and Mx. Beetes’ and my reflections. While reviewing the written data, constantly rewatching and relistening to the video- and audio-recorded data, and engaging in reflexive memoing, I grew concerned that my analysis only revealed my own interpretations and understandings. I created a collage of video-recorded excerpts of the harmonic improvisation activities and of audio-recorded examples of the participants’ vocal music improvisations during these activities. That collage became a canvas on which Mx. Beetes and the early childhood music development specialists painted their understandings of social music interactions and vocal music improvisations. Through the video-cued ethnography interview process, I engaged in conversations that helped me further illuminate my understandings and to position my knowledge in relation to their many perspectives. The phenomena existed within the overarching context, and I used qualitative bricolage to broaden my
understandings, to challenge my assumptions, and to undertake multiple methodologies that best suited this dissertation (Kincheloe, 2001).

Kincheloe (2001) described bricolage as “the possibility of the future of qualitative research” (p. 679). Although enacting one methodology may have enhanced methodological rigor, I allowed myself to be guided by the data for the purpose of representing multiple perspectives regarding social music interactions and vocal music improvisations beyond my own perceptions. As a fledgling researcher, I have recognized that many additional methodologies and methods exist that may have shaped the trajectory or scope of this dissertation. I have strengthened my findings by engaging in methodological plurality and documenting my justifications of case study (Yin, 2018) and video-cued ethnography (Tobin, 2019; Tobin & Hseuh, 2007). Qualitative bricolage served my needs regarding the data at hand. To enhance readers’ trust that my methodologies, methods, analysis, and findings represent the data to the best of my ability, I have thoroughly documented my active choices throughout the study’s development (Pratt et al., 2020). As I wrote my findings, I frequently referenced the participants’ understandings and attempted to represent my interpretations using clear, approachable language.

**Video-Cued Ethnography**

Through analysis and interpretation of the video- and audio-recorded data, I acknowledged my perspective comprised only one explanation of the phenomena. I required additional data from multiple perspectives to expand my understandings and to broaden my interpretations of the phenomena. After learning about qualitative bricolage, I added video-cued ethnography (Tobin, 2019) to the existing case study framework. By
modifying my design, three early childhood music development specialists contributed their interpretations of the four kindergarten student participants’ and Mx. Beetes’ social music interactions and vocal music improvisations during harmonic improvisation activities. As insiders to early childhood music development and outsiders to the study’s setting and participants, their viewpoints supplemented the existing data and strengthened my findings. Pratt et al. (2020) recommended researchers “get data from multiple sources to help ensure that their findings better reflect insights from the field” (p. 11), and I accomplished this recommendation by engaging three early childhood music development specialists in video-cued ethnographic interviews (Adair & Kurban, 2019a; Tobin, 2019).

Video-cued ethnography evolved into a distinct form of qualitative inquiry during the mid-1980s and has become a strong tradition in comparative education research and early childhood education research (Adair & Kurban, 2019b; Tobin, 2019). Tobin, a pioneer of video-cued ethnography, and a group of researchers filmed preschool lessons in China, Japan, and the United States to compare educational practices across these geographic areas (Adair & Kurban, 2019b; Tobin, 2019). In video-cued ethnography, researchers utilize videos as prompts to elicit data from stakeholders rather than as primary data sources (Adair & Kurban, 2019b). Stakeholders refers to persons who have an interest in a study’s setting, participants, and phenomena and may comprise child participants, teachers, administrators, parents, community members, and policymakers. Researchers include stakeholders as active participants in the research and data creation process, and they “position participants as experts on their practices” (Adair & Kurban, 2019b, p. 249). Stakeholders discuss their perceptions and ideas while watching the
videos, which may allow researchers to collect multiple perspectives over time, across geographic areas, and from many communities.

After showing selected video excerpts to a site’s local stakeholders, Tobin edited the videos based on stakeholders’ suggestions and showed the revised videos to similar stakeholders at the other geographic sites (Adair & Kurban, 2019b; Tobin, 2019). Those videos served as prompts for stakeholders to discuss their own educational practices and the familiar and unfamiliar practices displayed at other sites. Stakeholders’ responses comprised the data Tobin (2019) analyzed to find similarities and differences in educational practices across China, Japan, and the United States.

Tobin (2019) considered video-cued ethnography a means of expanding researchers’ and stakeholders’ understandings and challenging their assumptions. The researcher wrote that video-cued ethnographers “[view] informants as experts of their culture and [privilege] their emic understandings” (Tobin, 2019, p. 258). Rather than interpreting participants’ actions, researchers ask stakeholders to interpret and to reflect on their own actions, and researchers then use the stakeholders’ own words to represent their cultures. Adair and Kurban (2019a) recommended selecting a research site with willing, engaged, and interested participants and stakeholders; gathering multiple perspectives regarding the chosen video excerpts’ contexts and content; and finding commonalities among the stakeholders’ observations. In this dissertation, the stakeholders comprised the setting’s music teacher and three early childhood music development specialists who taught in the same geographic area. By utilizing video-cued ethnography, I incorporated multiple perspectives beyond my own understandings and created additional data to bolster my findings.
**Research Aims and Significance**

Throughout my experiences as an early childhood music development specialist, I have regarded music improvisation as a key aspect of young children’s music development. I have conversed with many other early childhood music development specialists and researchers regarding the myriad ways young children display their music understandings, develop their music vocabularies, and engage in playful social music interactions through music improvisation; however, I have encountered resistance to these ideas when discussing my work with musicians and researchers who have not engaged young children in music improvisation activities. By enacting this study, I add to the body of knowledge regarding young children’s vocal music improvisations. Through qualitative bricolage (Kincheloe, 2001; Rogers, 2012), I combined the context-rich data collection of descriptive case study (Yin, 2018) with the participant-generated language of video-cued ethnography (Tobin, 2019). By combining those methodologies, I designed and implemented a study that included nuanced and detailed explanations that illuminated the participants’ social music interactions and vocal music improvisations during harmonic improvisation activities through multiple perspectives.

**Purpose and Guiding Research Questions**

In this study, I examined how kindergarten students and a music teacher engaged in social music interactions and displayed music characteristics during harmonic improvisation activities. The purpose of this study was (a) to describe social music interactions between kindergarten students and a music teacher and (b) to categorize and to describe kindergarten students’ and a music teacher’s vocal music improvisations during harmonic improvisation activities. The guiding research questions are as follows:
● RQ1: How did kindergarten students and a music teacher engage in social music interactions during harmonic improvisation activities?

● RQ2a: What music characteristics did kindergarten students and a music teacher exhibit during harmonic improvisation activities?

● RQ2b: How did kindergarten students and a music teacher exhibit music characteristics during harmonic improvisation activities?

Setting

Physical Setting

I conducted research at an accredited parochial school located in the Southeastern United States. At the time of this study, the parochial school comprised one class per grade level from 4-year-old kindergarten through sixth grade. The school provided visual art, library, music, and physical education instruction to all students in addition to subject-based curricula. The local university provided music education and physical education through teaching partnership agreements with the school. I became familiar with the school during the two and a half years I worked as a graduate assistant teaching first through fourth grade general music. I purposefully selected the parochial school, the kindergarten class, and the music teacher because the music teacher used Gordon’s (2013) music learning theory and incorporated several music improvisation activities in a variety of meters and tonalities and without words during each lesson.

The participants attended twice weekly, 30-minute-long music lessons in the parochial school’s music room. The center of the music room was devoid of chairs or desks, which created a large open space conducive to sitting in a large circle and to moving around the room. An interactive white board, table, classroom instruments, and
two pianos sat on the room’s periphery. Mx. Beetes displayed the day’s music lesson activities, tonal patterns, rhythm patterns, vocabulary words, and written instructions on the interactive whiteboard. She often used one of the room’s two pianos or her personal ukulele to accompany songs and tonal music activities. For each lesson’s duration, she actively participated in music activities by sitting beside and moving with the kindergarten students.

**Music Setting**

In case study, the case’s context provides valuable information regarding the underlying phenomena (Yin, 2018). This case’s context comprises the music and music activities in which the kindergarten students and music teacher engaged and their social music history (McNair, 2010). Throughout the pilot study I completed in fall 2019 and this study’s data collection timeframe, the kindergarten students and music teacher sang and rhythmically chanted in a variety of meters and tonalities; imitated, labeled, decoded, created, and wrote rhythm patterns and tonal patterns; performed a variety of locomotor movements and stationary movements; and incorporated playful scenarios, stories, and games into each lesson. Each lesson began with a greeting song, during which they entered the classroom, sang the familiar song, demonstrated continuous fluid movement using various body parts, and called out words and rhythm patterns.

Taking the kindergarten students’ suggested words and rhythm patterns, the teacher either imitated their sounds or manipulated their sounds into an existing or new music context. For example, Miguel\(^3\), a kindergarten student participant, called out, “Banana!” The teacher adapted that word into a duple meter rhythm chant that ended

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\(^3\) Pseudonym chosen by researcher
with purposeful silence. The class filled the purposeful sound with one final, enthusiastic, “BANANA!” That routine repeated until the teacher began to sing the greeting song again. On that day, the greeting song activity included singing a familiar song, standing in self-space, engaging in stationary movement, free improvisation, repetition, rhythmic chanting, and purposeful silence. On other days, the greeting song included echoing rhythm patterns or tonal patterns, creating rhythm patterns or tonal patterns, singing a bassline, and other music concepts. Each activity within each lesson had opportunities for the kindergarten students to initiate and alter the music contexts and play scenarios, and the teacher freely followed the kindergarten students’ interests. Each lesson included at least one type of improvisation initiated by the music teacher or by the kindergarten students (Reese, 2007). In addition to creating a music environment suited to expanding the kindergarten students’ music vocabularies, the music teacher often engaged the kindergarten students in conversations about their lived experiences and their personal feelings. She purposefully acknowledged and validated their fear, sadness, and joy through gentle conversation and empathy. The music teacher’s incorporation of a music learning theory-based curriculum, frequent engagement in a variety of improvisation activities, and responsiveness to the kindergarten students’ music and emotional needs provided an ideal context for the case study.

Participants

Kindergarten Student Participants

The participants included kindergarten students who were enrolled in the school’s 5-year-old kindergarten class. Many of those kindergarten students were enrolled in 4-year-old kindergarten at the same school the prior year, during which time they attended
music classes taught by Mx. Beetes. The entire class of kindergarten students attended and participated in music classes during the data collection timeframe. Using my observations from the pilot study and information from Mx. Beetes, I purposefully selected four kindergarten student participants (pseudonymized Dominique, Leah, Miguel, and Naomi) whose music vocalizations and physical gestures provided rich information regarding social music interactions and vocal music improvisations (Patton, 2015).

I employed group characteristics sampling to select those four kindergarten student participants to gain insight regarding diversity and “common patterns that are common across the diversity” (p. Patton, 2015, p. 267). The primary criterion for inclusion comprised each kindergarten student participant’s demonstrated vocal music improvisation skills. I used my knowledge of the kindergarten students’ skills, which I developed throughout a series of observations completed during the fall 2019 semester, and Mx. Beetes’ expertise as the kindergarten students’ music teacher to select kindergarten student participants who frequently demonstrated vocal music improvisations during music class. To analyze the social music interactions and music characteristics of those vocal music improvisations, I required a sample of kindergarten student participants who consistently performed vocal music improvisations. I included kindergarten students of different sexes, races, and ethnic backgrounds. The kindergarten students’ primary caretakers indicated their informed consent on a paper form (Appendix C), and I protected each participant’s identity using pseudonyms. The following subsections comprise descriptions of the four kindergarten student participants.
**Dominique.** Dominique was both serious and silly, and she had long, dark hair pulled into a tight ponytail. Although the other three kindergarten student participants had attended the school since four-year-old kindergarten, Dominique had enrolled during fall 2019. She spoke Spanish fluently, and she often whispered in Spanish with another girl throughout the music lessons. Dominique watched intently while Mx. Beetes taught the class, and she frequently volunteered to improvise during harmonic improvisation activities. She made eye contact while she improvised, and her improvisations generally related to the rhythm and tonal music contexts Mx. Beetes established.

**Leah.** With one hand in her mouth and one hand swiping at her wispy blonde hair, Leah often looked at the floor while Mx. Beetes taught. Even so, she snapped to attention each time Mx. Beetes asked for volunteers to improvise on their own. She often smiled and looked at Mx. Beetes during her solo improvisations, but she quickly returned to her attention to the floor after she finished. She participated actively during movement activities, she used a consistent singing voice, and her vocal music improvisations generally related to the harmonic improvisation activities’ rhythm and tonal music contexts.

**Miguel.** Miguel was an energetic and goofy young boy. His shirt always came untucked from his pants, and his short brown hair stuck up from his forehead. Miguel constantly called out words, noises, and music sounds throughout the music lessons. He fidgeted while sitting on the floor, and he moved quickly around the room during movement activities. He often volunteered to improvise, and his vocal music improvisations included a variety of noises and sounds unrelated to and related to the established rhythm and tonal music contexts.
Naomi. Naomi almost always had a wide smile on her round face. Enthralled by the energetic environment, she sat at attention while Mx. Beetes taught and frequently moved her body to the music. Sometimes the headband that held her tightly curled hair fell off her head as she moved. Naomi raised her hand first whenever Mx. Beetes asked the kindergarten students to improvise on their own. She had a clear singing voice, she developed her improvisations over time, and she regularly improvised within the established rhythm and tonal music contexts.

Music Teacher Participant

Mx. Beetes, the kindergarten students’ music teacher, acted as a full participant (Patton, 2015). I chose Mx. Beetes as a participant because of her relaxed and child-centered teaching style, the prevalence of vocal music improvisation activities during each music lesson, and her background as a musician and music teacher. Mx. Beetes holds a bachelor’s degree and a master’s degree in music education. At the time of the study, she had seven years’ experience facilitating early childhood music engagements and five years’ experience as a parochial school elementary music teacher. She also held professional development level certifications through the Gordon Institute for Music Learning in Elementary General Music Level 1, Early Childhood Music Level 1, and Early Childhood Music Level 2.

Mx. Beetes used Gordon’s (2013) music learning theory to craft twice weekly, 30-minute music lessons for kindergarten students at the parochial school. She kept notes regarding each music lesson’s music content and music activities. Each music lesson included songs and rhythm chants with and without words and in a variety of meters and tonalities. She incorporated several vocal music improvisation activities throughout each
music lesson to provide a variety of tonal, rhythm, melodic, and harmonic improvisation experiences. The kindergarten students frequently had opportunities to engage in unstructured vocal music improvisation, such as creating sirens and percussive vocalizations, and structured vocal music improvisation, such as creating 4-beat rhythm patterns and melodic improvisation with harmonic accompaniment. She also organized unstructured and structured vocal music improvisation activities for full group participation and for individual participation. Mx. Beetes embedded vocal music improvisation activities within each lesson, and she used the kindergarten students’ music vocalizations and music responses during non-improvisation music activities as springboards into impromptu vocal music improvisation activities. She demonstrated her vocal music improvisation facility during free, rhythm, tonal, melodic, and harmonic improvisation activities and in a variety of meters and tonalities (Reese, 2007). Her willingness to play with the kindergarten students, her acceptance of a wide variety of sounds, her broad definition of music improvisation, and her vocal music improvisation ability made her an ideal participant.

**Early Childhood Music Development Specialist Participants**

Three early childhood music development specialists participated as nonparticipant observers, and each specialist completed one video-cued, think-aloud interview during fall 2021. I used network sampling to select those participants (Patton, 2015). The three early childhood music development specialists worked locally as music educators, had comprehensive knowledge of Gordon’s (2013) music learning theory, and had experience engaging young children in vocal music improvisation activities. I have outlined each early childhood music development specialist’s qualifications and my
justifications for their inclusion in the following subheadings, organized chronologically by interview date.

Molly Drummond⁴. Molly Drummond holds a bachelor’s degree and a master’s degree in music education, a professional development level certificate in Early Childhood Level 1 and Level 2 through the Gordon Institute for Music Learning, and a Level 1 certificate through the American Orff-Schulwerk Association. She taught early childhood music development classes and elementary general music throughout her master’s study, and she worked as a kindergarten through second grade music teacher in a local public school at the time of the interview. Using tenets of music learning theory and Orff-Schulwerk, Molly crafted playful lessons, engaged young children in rhythm pattern and tonal pattern imitation and improvisation, and facilitated music activities to enhance her students’ music fluency and music literacy. I chose to interview Molly because of her experiences facilitating unstructured music development sessions with young children and their caretakers, as well as her experience engaging kindergarten students in structured music guidance. Molly also had familiarity with the study’s physical and music settings because she previously worked at the parochial school as a master’s student. Her insight added value to the study because of her deep knowledge of developmentally appropriate behavioral expectations and music expectations for kindergarten students, her understandings of music learning theory, and her history of facilitating vocal music improvisation activities with young children.

Dexter Gordon⁵. Dexter Gordon had extensive training in church music and conducting before obtaining a second master’s degree in the field of music education. He

⁴ Pseudonym chosen by participant
⁵ Pseudonym chosen by participant
chose to specialize in early childhood and elementary general music after completing a professional development level certificate in Early Childhood Level 1 through the Gordon Institute for Music Learning. He subsequently completed a Level 1 certification through the American Orff-Schulwerk Association and a professional development level certificate in Early Childhood Level 2 through the Gordon Institute for Music Learning. At the time of the interview, Dexter had five years’ experience as a kindergarten through fifth grade music educator. His teaching interests included community-building, movement, improvisation, and music literacy, and he actively refined his teaching skills to meet his students’ developing music needs and social-emotional needs. I chose to interview Dexter because of his perceptive nature, purposeful social music interactions with young children, and continually evolving insight regarding early childhood music development. Dexter frequently engaged students in rhythm, melodic, and harmonic improvisation activities, and he used music improvisation activities to facilitate students’ self-discovery of their personal music voices and to expand students’ music vocabulary.

**Jane Funda**. Jane Funda holds a bachelor’s degree in music education and a professional development level certificate in Elementary General Level 1 through the Gordon Institute for Music Learning, and she had completed one semester of a master’s degree in music education at the time of the study. She had four years’ experience teaching music play to 0- to 4-year-old children in school and community settings, teaching kindergarten through twelfth grade general music, and teaching sixth through twelfth grade band. Jane valued providing young children playful, exploratory music experiences. She often crafted music activities during which they used their imaginations,

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6 Pseudonym chosen by participant
created games together, and connected music content to their lived experiences. Like Molly and Dexter, she frequently engaged students in music improvisation activities in a variety of meters and tonalities. Possessing an enduringly playful and optimistic personality, Jane perceived subtle social music interactions and elements of play when viewing the data. Because we had known each other for only a few months before engaging in the video-cued interview, we had minimal knowledge of one another’s teaching style. Jane’s contributions were valuable because of her background in elementary general music learning theory techniques and her experiences teaching instrumental music. Our shared knowledge of music learning theory, social music interactions, and vocal music improvisations enhanced my ability to understand her viewpoints, and our brief social history contributed to my ability to ask her deep questions regarding her thoughts, perceptions, and understandings of the phenomena.

**Researcher Participant**

I participated as a complete participant observer (Spradley, 1980/2016). During the study’s duration, I held a bachelor’s and a master’s degree in music education and was enrolled as a PhD candidate in music education. I had six years’ experience teaching K-6 general music, ten years’ experience teaching 0- to 4-year-old children, and three years’ experience teaching at the collegiate level. I had completed professional development courses through the Gordon Institute for Music Learning in Elementary General Music Level 1, Early Childhood Music Level 1, and Early Childhood Music Level 2; Level 1 and Level 2 through the American Orff-Schulwerk Association in Orff-Schulwerk; and the First Steps in Music certification course through the Feierabend Association for Music Education. When designing and leading music learning
experiences, I primarily use Gordon’s (2013) music learning theory and Orff-Schulwerk to guide my teaching. I incorporate songs and rhythm chants with and without words and in a variety of meters and tonalities, tonal pattern and rhythm pattern instruction, unstructured and structured music activities, movement, and music creativity and music improvisation activities into each music lesson.

**Positionality.** I adopted the roles of colleague, early childhood music development specialist, and researcher as I worked with the four kindergarten student participants and Mx. Beetes. Mx. Beetes and I attended the same university during the data collection period, and we held similar backgrounds regarding our training and teaching experiences. As an insider, I immersed myself in the music class’ culture, engaged in social music interactions and music activities with the participants, and gained contextual knowledge of the setting and participants (Patton, 2015). Mx. Beetes and I shared common vocabularies regarding social music interactions (Arrasmith, 2018; McNair, 2010), music skill learning sequences in music learning theory (Gordon, 2012, 2013), and early childhood music development (Gordon, 2012, 2013; Valerio et al., 1998). Because of those commonalities, we easily engaged in conversations about the four kindergarten student participants’ demonstrated vocal music improvisation abilities and the music contexts and music content of each lesson.

As an outsider, I made every attempt to support the music learning environment in unobtrusive ways. Although I taught several grade levels at the parochial school as a master’s student, I did not teach the selected kindergarten class during either their 4-year-old kindergarten or 5-year-old kindergarten years. Mx. Beetes helped establish my role as a complete participant observer by introducing me to the kindergarten students and
answering their questions about why I attended and recorded their music classes, and the kindergarten students quickly became accustomed to my presence. By virtue of being an adult in the classroom, the kindergarten students perceived me as an authority figure and used nonverbal communication and verbal communication to ask for help or to adjust their behavior. I frequently smiled when they looked at me, tied their shoelaces when they asked, and nonverbally acknowledged their social behaviors and music behaviors. Mx. Beetes noted that she felt comfortable with the ways I interacted with the kindergarten students because of her observations of my teaching practices with other young children.

**Epistemological Orientation.** Although both Mx. Beetes and I used Gordon’s (2012, 2013) music learning theory and Valerio et al.’s (1998) *Music Play: The Early Childhood Music Curriculum Guide for Parents, Teachers and Caregivers* to guide our teaching, we held different and sometimes conflicting opinions regarding classroom management and expectations of young children’s social music behaviors and vocal music responses. Mx. Beetes cultivated an environment saturated with music sounds, bustling activity, noise, and conversation. She encouraged the kindergarten students to create music and non-music sounds, and she often stopped the lesson to answer their questions and to engage them in conversations about their feelings, issues in society, and various other topics. In my previous experiences teaching similar age groups, I provided structures and developed procedures to minimize conversations and other non-music noises during music class. When Mx. Beetes interacted with the kindergarten students differently than I would have approached a similar situation, I asked her to clarify her decision processes regarding why she chose the type of interaction and how she
perceived the interaction impacted the classroom environment. I respect the fluidity with which Mx. Beetes taught and the deep relationships she cultivated with the kindergarten students. She often modeled and encouraged behaviors and noises that some music teachers may consider distracting for the purpose of engaging the kindergarten students in conversations or vocal music improvisation activities; however, these behaviors and noises ultimately strengthened their social bonds, emotional connections, and music understandings.

During our initial conversations regarding this study, Mx. Beetes volunteered to weave several vocal music improvisation activities throughout each lesson. The kindergarten students and Mx. Beetes engaged in many kinds of music activities, including music activities that did not include music improvisation. As I continued to collaborate with Mx. Beetes and to analyze the data, I only addressed the lessons’ harmonic music improvisation activities. Because of my positionality and the ways I framed this dissertation, I continuously acknowledged and recognized my positionality and subjectivity regarding what sounds constituted vocal music improvisations and how to define harmonic improvisation. By using video-cued ethnographic methods, I expanded my mindset, altered my definitions, and included multiple perspectives regarding the social music interactions and the vocal music improvisations displayed by the four kindergarten student participants and Mx. Beetes during harmonic improvisation activities.

Anonymity and Confidentiality

To respect their rights to anonymity and confidentiality, I referred to each participant using a pseudonym. I assigned each kindergarten student participant a
pseudonym, and the music teacher participant and the early childhood music development specialist participants chose their own pseudonyms. I replaced each participant’s real name with the corresponding pseudonym in all written and transcribed data to further ensure anonymity. Additionally, I have not disclosed the setting’s location or the early childhood music development specialists’ work locations in this document. I protected all data using two-factor identification and deleted video links shared during the interviews that occurred on the Zoom virtual meeting platform.

Although I have taken steps to protect the participants’ identities, I cannot guarantee that all participants will remain anonymous in perpetuity. The four kindergarten student participants and Mx. Beetes may be recognized from video or audio recordings. Because their body language, facial expressions, movements, and vocalizations comprised integral data, I declined to blur their faces or distort their audio in those recordings. The early childhood music development specialists’ identities may also be uncovered due to our professional connections. I have followed institutional guidelines regarding participant well-being for non-human subjects research, and I have continued to consider my role in protecting the participants’ rights to anonymity and confidentiality as I disseminate and present my research.

Data Collection

Data collection included:

- video and audio recordings of seven music classes, five of which included harmonic improvisation activities,
- my written observations,
- Mx. Beetes’ and my reflections,
● a pragmatic interview and a think-aloud interview with Mx. Beetes,

● an individual video-cued interview with each of the three early childhood music
development specialists, and

● music transcriptions of the four kindergarten student participants’ and Mx.
Beetes’ vocal music improvisations during harmonic improvisation activities.

Each data source contributed to my nuanced understanding of the social music
interactions and vocal music improvisations that occurred during harmonic improvisation
activities. By recording entire classes, I also gained valuable insight into the surrounding
context and the participants’ other music experiences, social music interactions, and
social interactions. The following subsections include detailed information regarding data
collection.

**Classroom Video- and Audio-Recordings**

I collected video- and audio-recorded data during seven 30-minute music lessons,
one per week between late January and early March 2020. I video recorded each music
lesson using one password protected iPad placed on the periphery of the room and one
Garmin 360° camera placed in the center of the room. Those devices captured the music,
physical gestures, and other nonverbal and verbal social music interactions occurring
between the participants. Of the seven video-recorded classes, five classes included a
harmonic improvisation activity that occurred at the end of the lesson. The Garmin 360°
camera ran out of battery during the first data collection session and ran out of storage
during the final data collection session, and the participants’ faces were obscured in the
final data collection session’s stationary recording due the participants’ relocation during
a previous movement activity. After each class, I downloaded and stored the video
recordings on a password protected laptop. I transcribed and analyzed the video-recorded excerpts of harmonic improvisation activities using Final Cut Pro to identify timings, Noteflight to notate music transcriptions, and Google Docs to write vignettes and to create charts of each participant’s actions and vocal music improvisations.

Each of the four selected kindergarten student participants wore an audio recording device during the music classes. Those devices comprised one Sony PX Series Digital Voice Recorder, two iPhone 6S, and one iPhone XS. I piloted the use of those devices during the fall 2019 semester and determined that the devices recorded the four kindergarten student participants’ music vocalizations with adequate sound quality. To capture their sounds, I outfitted each device with microphones integrated into headphones. The digital recorders, in combination with the video recordings, captured their vocal music improvisations during group and individual music improvisations with greater clarity than the video recordings alone. Mx. Beetes did not wear an audio recording device because her improvisations were consistently audible during both group and individual improvisations.

Although the audio recording devices enhanced my aural perception of the four kindergarten student participants’ vocal music improvisations, several issues arose. Due to a scheduling issue, none of the four kindergarten student participants wore audio recording devices during the first data collection session. On a few occasions, a microphone became unplugged from a device during class, resulting in a loss of audio data for that participant. The audio recording devices did not have the capacity to record extremely quiet vocalizations, and audio recordings included static sounds during loud
vocalizations. Table 3.2 comprises information about each class’ dates, participants, inclusion of harmonic improvisation activities, and data collection issues.

**Observations and Reflections**

Throughout each lesson, I wrote field notes about the lesson’s music contexts, music content, and music activities; the four kindergarten student participants’ and Mx. Beetes’ vocal music improvisations; and their social music interactions (Patton, 2015). Patton (2015) defined field notes as “rich, detailed descriptions, including the context within which the observations were made” (p. 14). I used those field notes to generate insights regarding the participants’ social music interactions and vocal music improvisations and my understandings of these phenomena. After each music lesson, Mx. Beetes and I wrote reflections on the lesson and the kindergarten students’ social music interactions and vocal music improvisations. I stored my field notes and our reflections digitally in a password-protected, shared folder on Google Drive. To enhance our collaboration throughout the project, we had access to one another’s writings. Immediately following each lesson, Mx. Beetes and I briefly discussed our perceptions of the four kindergarten student participants’ and her social music interactions and vocal music improvisations. Using those reflections and our communications, Mx. Beetes adjusted the next music lesson’s music contexts and music activities. Mx. Beetes’ reflections also provided valuable information regarding her teaching philosophy, definition of improvisation, perceptions of the four kindergarten student participants’ vocal music improvisations, and anticipation of their vocal music improvisation development.
Interviews

Mx. Beetes, the early childhood music development specialists, and I engaged in individual interviews during which we watched video-recorded excerpts of the four kindergarten student participants and Mx. Beetes engaging in social music interactions and vocal music improvisations. I completed one pragmatic interview with Mx. Beetes, one think-aloud interview with Mx. Beetes, and three video-cued interviews with each early childhood music development specialist. Table 3.3 comprises information regarding the interview types, participants, and dates.

Pragmatic and Think-Aloud Interviews with Mx. Beetes. Mx. Beetes and I engaged in two interviews: one pragmatic interview before the project’s commencement and one think-aloud interview after the project’s conclusion (Patton, 2015). During the pragmatic interview, we discussed the music contexts and vocal music improvisation activities incorporated in the music lessons. Mx. Beetes discussed her personal philosophies regarding music improvisation and asked about my expectations of her. Mx. Beetes and I decided that she would continue to include a variety of vocal music improvisation activities in her lessons, share her lesson plans with me, and have the freedom to deviate from her lesson plans and to follow the kindergarten students’ music and social needs as demonstrated by their music vocalizations, spoken questions, and play.

Prior to the think-aloud interview, I selected several stationary and Garmin 360° video clips that exemplified the various types of vocal music improvisation activities, social music interactions, and vocal music improvisations experienced and displayed by the four kindergarten student participants and Mx. Beetes. I also prepared a preliminary
list of questions to guide our discussion (Appendix D). Due to issues arising from the COVID-19 pandemic, we conducted the interview over the Zoom virtual meeting platform. I recorded our conversation for subsequent transcription and analysis. I sent Mx. Beetes secure links to each video clip, and we watched and listened to the clips together as she shared her screen. She paused the videos as needed to describe what she saw and heard; to ask questions about the overarching context; and to discuss her teaching, her vocal music improvisation models, and her perceptions of the music environment and social music interactions. After watching and discussing the video clips, we engaged in conversation regarding the social music interactions we saw, the vocal music improvisations we heard, and our personal philosophies on teaching and improvisation. Our conversation naturally incorporated many of my preliminary questions, and I used the preliminary questions and clarifying questions to gain insight into Mx. Beetes’ thought processes, perceptions, and teaching philosophy. Appendix D comprises the interview protocol for Mx. Beetes’ think-aloud interview.

Mx. Beetes and I used the pragmatic interview to confirm the goals and expectations of the study, and we engaged in informal discussions to guide the creation and implementation of each music lesson. During the think-aloud interview, I gained data regarding our personal understandings of young children’s vocal music improvisations, how we engage in social music interactions, and how we define and enact improvisation activities. After transcribing each interview, I sent Mx. Beetes a copy of the document to ensure that I represented her words and thoughts accurately. Mx. Beetes confirmed the transcript’s accuracy and requested no edits to its content.
Individual Video-Cued Interviews with Three Early Childhood Music Specialists. Using Mx. Beetes’ think-aloud interview as my guide, I selected one stationary video excerpt from the first data collection session (January 23, 2020) and one 360° video excerpt from the fifth data collection session (February 20, 2020) to show the early childhood music specialists. I also chose a total of 20 audio excerpts of vocal music improvisations from the fifth (February 20, 2020), sixth (February 27, 2020), and seventh (March 5, 2020) data collection sessions to isolate each participant’s sounds from their visible actions. The video and audio excerpts were typical in that they represented recognizable examples of social music interactions, vocal music improvisations, and harmonic improvisation activities specific to the study’s context (Adair & Kurban, 2019a). The early childhood music development specialists had familiarity with similar contexts due to their knowledge of harmonic improvisation and their teaching experiences.

Tobin (2019) noted the importance of framing video shots, featuring specific participants rather than entire classes in the videos, and creating short video excerpts for participants to watch. Although Tobin (2019) and Tobin and Hseuh (2007) recommended creating artistic and pleasurable viewing experiences through videographic techniques, Mead (as cited in Adair & Kurban, 2019b) suggested showing stakeholders minimally edited videos to reduce the potential of superimposing the researcher’s cultural understandings on the raw data. Following Mead’s suggestion, I treated my videos as documentation rather than as art. I ensured that the video and audio excerpts were short enough to watch during a single interview session, and I edited the excerpts for audio clarity and to identify the kindergarten and music teacher participants. In the stationary
video excerpt, I circled each participant in a different color using video editing software to account for framing issues and to draw attention to the participants. The 360° video excerpt did not include those circles because I could zoom, rotate, and frame the video while watching the excerpt during the interviews. The stationary video excerpt was approximately 11-minutes long, and the 360° video excerpt was approximately 3-minutes long. The audio excerpts ranged from 10- to 25-seconds long each.

Many researchers utilizing video-cued ethnography conduct focus group interviews; however, I used a modified approach by interviewing each early childhood music development specialist individually. Pragmatically, I was unable to host a focus group due to COVID-19 restrictions. Methodologically, I wanted to foster an interview environment in which each early childhood music development specialist could examine and reflect on the video and audio excerpts at their own pace, express opinions uninfluenced by other participants, and provide detailed clarifications regarding their unique perceptions. I began each interview by providing an overview of this dissertation’s purpose and guiding research questions, setting, and participants, and I outlined the interview protocol (Appendix E). We began by watching the stationary video excerpt once while the participant took notes. Then, we watched the same stationary video excerpt a second time. The participants paused the video to discuss their observations, and I took notes and asked clarifying questions as needed during the second viewing. After the second viewing, I interviewed the participant using a set of predetermined questions. Guided by Tobin’s (2019) approach, I asked the early childhood music development specialists open-ended questions about what they noticed, what they saw, and what they heard regarding social music interactions and vocal music
improvisations. I avoided asking questions that would elicit judgment-based responses regarding their perceptions of good or bad teaching techniques, behaviors, or vocal music improvisations. We repeated that same process of first viewing, second viewing, and interview using the 360° video excerpt.

The final segment of the interview comprised listening to the audio clips. I described the date of the improvisation, which participant was improvising, and if they were improvising in a group or alone. I played each audio excerpt at least once and repeated excerpts when requested by the participant. The participants commented on the audio clips throughout the listening process, and I asked them open-ended questions focused on the music characteristics of the participants’ vocal music improvisations.

After viewing all video and audio excerpts, I asked the participants to reflect on the interview experience and to offer suggestions to refine the interview protocol for future studies. Appendix E comprises the complete interview protocol for the three individual video-cued interviews. After transcribing their interviews, I sent each early childhood music specialist a copy of the transcript document to ensure that I represented their words and thoughts accurately. Each specialist confirmed their transcript’s accuracy and requested no content edits.

**Music Transcriptions**

During the fall 2018 semester, I conducted a pilot study in which I began to investigate music transcription, music notation, and visual representation of aural music phenomena. I gathered video recordings while teaching early childhood music engagement sessions with preschool-aged children, and I transcribed several examples of these young children engaging in social music interactions with their peers and me. As I
adopted the roles of both teacher and researcher throughout the pilot study, I developed a deep understanding of those young children’s music development. Throughout the music transcription process, I explored a variety of ways to communicate their music vocalizations. I used my knowledge of the young children’s music development to guide my interpretation and transcription of their music vocalizations, their social music interactions, and the ways their music vocalizations related to the established music context. Appendix F includes an example transcription from that pilot study.

As I transcribed the four kindergarten student participants’ and music teacher’s vocal music improvisations, I represented sounds that occurred during harmonic improvisation activities using standard Western notation. Using the transcription and analysis techniques I developed during my pilot study, I documented and described the participants’ improvisations using music notation techniques and prose. Whenever possible, I represented sounds using the common time signature of four quarter notes per measure, half-step accidentals, and rhythms no shorter than 16th notes. I noted tempo changes, I indicated silences using rests, and I marked long stretches of cacophonous sound using empty measures. Although Mx. Beetes accompanied all harmonic improvisation activities using the ukulele, I only notated her strumming pattern when it provided necessary context to the vocal music improvisation. Text below the music staff comprises vocables and words sung by the participants, and text above the music staff comprises the name of the improvising participant, tempo markings, descriptive text, directions spoken by Mx. Beetes, and ukulele chord names.

At all times, I attempted to create neat, precise music transcriptions that readers with a variety of music notation knowledge may interpret using their personal levels of
understanding. To check the accuracy of my transcriptions compared to the audio recordings, I frequently downloaded a midi file of the transcription to play simultaneously with the audio recording in Audacity. I made necessary adjustments to pitches, rhythms, tempos, rests, and empty measures until the midi track and the audio recording played synchronously.

As I transcribed those vocal music improvisations, I wrote analytic memos to guide my analysis and to create thick, rich descriptions of the participants’ social music interactions and vocal music improvisations (Patton, 2015). Additionally, I created timelines to represent the harmonic improvisation activities’ routines, procedures, and timings (Lochhead, 2016). The music transcriptions and timelines contributed to information regarding how the participants engaged in harmonic improvisation activities and the music characteristics of their vocal music improvisations. I intended the music transcriptions to supplement video- and audio-recorded data rather than to replace these data. By creating those music transcriptions, I used music notation techniques to represent my understandings and to emphasize salient aspects of the data. I recommend readers view the music transcriptions in tandem with the audio-recorded data referenced throughout this dissertation, which can be found in the supplemental materials.

**Data Coding and Analysis**

After reviewing all written and transcribed data from the seven data collection sessions and Mx. Beetes’ interviews, I engaged in several analytic techniques and coding processes (Saldaña, 2016). Figure 3.2 comprises a data analysis flow chart regarding the sequence of data analysis, and Table 3.4 comprises a chart of first and second cycle coding processes and example codes. The foundation of my analysis comprised
repeatedly watching and listening to all video- and audio-recorded data. I internalized the participants’ social music interactions and vocal music improvisations by imitating their actions, words, and sounds, which allowed me to separate these phenomena from unrelated actions and sounds that occurred throughout the data. Once I embodied the data, I wrote vignettes to organize my understanding of the participants’ social music interactions and vocal music improvisations during each video-recorded harmonic improvisation activity. I used descriptive prose to identify actions, spoken words, body language, music sounds, and sequences of instruction.

After writing vignettes for each video recording, I created a chart comprising process codes of each participant’s social music interactions and in vivo codes of their spoken words and vocal music improvisations (Saldaña, 2016). Each row comprised a timestamp during which an action or sequence of instruction occurred, and each column comprised a participants’ actions, spoken words, and music sounds. Appendix G comprises an excerpt from the coding chart. Using the chart, I further characterized the harmonic improvisations by adding nuanced details regarding the phenomena to the vignettes. I also used the chart to identify participants’ vocal music improvisations, to create audio-recorded vocal music improvisation excerpts, and to create music transcriptions of participants’ vocal music improvisations. I analyzed those transcriptions using a predetermined set of provisional codes based on common music characteristics (Saldaña, 2016). Throughout the analysis process, I wrote analytical memos to document my decisions, to collect my thoughts, and to engage in preliminary thematic organization. Although I gained an intense understanding of the data I had at hand, I determined that my own understandings limited the depth and trustworthiness of my analysis.
Recognizing the need for additional perspectives, I engaged in video-cued ethnographic methods as described in previous sections (Adair & Kurban, 2019a, 2019b; Tobin, 2019; Tobin & Hseuh, 2007). Using the transcriptions from the three video-cued interviews, I highlighted the early childhood music development specialists’ words as in vivo codes and wrote descriptive codes of their observations (Saldaña, 2016). I analyzed the video-cued interviews to find commonalities and dissent between my perceptions and the early childhood music development specialists’ perceptions (Adair & Kurban, 2019b; Tobin, 2019). I created a second chart comprising a row for each data point and columns organized by data source, printed page number, raw data excerpt, notes of my ideas, in vivo or descriptive code category, and code label. Appendix H comprises an excerpt from the video-cued interview data coding chart. I continued to write analytic memos to document my decisions and to compare my perceptions with the early childhood music development specialists’ perceptions.

Saldaña (2016) described in vivo codes as splitter codes used for nuanced analysis and descriptive codes as lumper codes used to reveal patterns. By splitting and lumping my bricolage data, I uncovered minute details of the participants’ social music interactions and vocal music improvisations, and I recognized broad patterns of these phenomena through multiple perspectives. After engaging in those first cycle coding procedures, I read across the data and my analysis to organize second cycle pattern codes (Saldaña, 2016). By engaging in pattern coding, I created labels to identify and to categorize similarly coded data from the first cycle coding procedures. Those pattern codes informed the themes discussed in the subsequent chapters.
Credibility, Integrity, and Trustworthiness

I enhanced credibility by engaging in “in-depth fieldwork that yields high-quality data” (Patton, 2015, p. 643), engaging in in-depth interviews (Saldaña, 2016), and constant comparison. Throughout the study, I engaged in analytic memoing and reflexive analysis, and I provided an audit trail by describing how I made pertinent decisions regarding methodological design, data collection, and data analysis. In this chapter, I have provided detailed descriptions of the emergent design, the participants, the data collection process, and the data analysis process (Rogers, 2012).

Although triangulation comprises a key aspect of case study (Yin, 2018), I determined crystallization best suited this dissertation (Ellingson, 2014; Pratt et al., 2020; Tracy, 2010). Tracy (2010) described the purpose of crystallization as “[opening] up a more complex, in-depth, but still thoroughly partial, understanding of the issue” (p. 844). Each participant imparted their own perspectives and understandings, which shifted over time and in different contexts (Kincheloe, 2005). Rather than seeking sources of agreement, I compared information from written observations and reflections, video recordings, audio recordings, interviews, music transcriptions, and multiple stakeholders to create a nuanced interpretation of multiple viewpoints and to reveal relationships between our understandings (Kincheloe, 2005; Ellingson, 2014). After transcribing the video recordings, audio recordings, and interviews, I ensured accuracy through member checking, which comprised clarifying the data and confirming my interpretations with Mx. Beetes and the three early childhood music development specialists (Patton, 2015). Mx. Beetes and the three early childhood music development specialists reviewed their interview transcripts to ensure that I portrayed their observations, thoughts, and intentions
accurately. Whenever possible, Mx. Beetes and the early childhood music development specialists had the opportunity to offer clarifying comments, to resolve ambiguities, and to ensure accurate interpretation of the data. They reviewed the findings, offered suggestions for refinement, and confirmed that I represented their ideas and words accurately.

Stakeholders and readers require trust in the researcher’s data collection and analysis procedures and the subsequent representation of the culture (Adair & Kurban, 2019b). Pratt et al. (2020) defined trustworthiness in qualitative bricolage as the degree of competence, integrity, and benevolence demonstrated by the researcher’s explanation of active choices, writing “bricoleurs display three abilities: the ability (a) to ‘cobble things together,’ (b) to understand and engage available resources, and (c) to use a combination of existing analytical moves to solve a particular problem” (p. 9). I demonstrated competence by researching my chosen methodologies, engaging in participant observation, using multiple examples of collected data during interviews, interviewing multiple stakeholders in early childhood music development, and providing an audit trail (Yin, 2018). Regarding integrity, I grounded my analysis and findings in an interpretivist ontology (Prasad, 2015). Each participant provided their interpretations of the data, and I used their interpretations alongside my own to create a nuanced, detailed portrayal of the participants’ social music interactions and vocal music improvisations during harmonic improvisation activities. To practice benevolence, I honored participants’ actions, sounds, and words throughout my analysis and respected their understandings by referencing their contributions throughout my findings. This dissertation comprises a nuanced investigation of a single vocal music improvisation context, and I strengthened my
findings by engaging in well-documented qualitative bricolage methods and by incorporating multiple perspectives from stakeholders.
Table 3.1 Research questions and corresponding units of analysis, data collection, and coding procedures.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Units of Analysis</th>
<th>Data Collection</th>
<th>Coding Procedures</th>
</tr>
</thead>
</table>
Table 3.2 Timeline, data sources, participants, and harmonic improvisation of video- and audio-recorded data.

<table>
<thead>
<tr>
<th>Date</th>
<th>Data Sources</th>
<th>Participants</th>
<th>Issues</th>
<th>Harmonic Improvisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 23, 2020</td>
<td>- Stationary</td>
<td>- Dominique - Leah - Miguel - Mx. Beetes - Naomi</td>
<td>Scheduling issue prevented the use of audio devices; Garmin 360° camera battery died</td>
<td>Yes</td>
</tr>
<tr>
<td>February 6, 2020</td>
<td>- Stationary - Garmin 360° - Audio</td>
<td>- Dominique - Leah - Miguel - Mx. Beetes - Naomi</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>February 13, 2020</td>
<td>- Stationary - Garmin 360° - Audio</td>
<td>- Dominique - Leah - Miguel - Mx. Beetes - Naomi</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>February 20, 2020</td>
<td>- Stationary - Garmin 360° - Audio</td>
<td>- Dominique - Leah - Miguel - Mx. Beetes - Naomi</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>February 27, 2020</td>
<td>- Stationary - Garmin 360° - Audio</td>
<td>- Dominique - Miguel - Mx. Beetes</td>
<td>Two kindergarten student participants absent</td>
<td>Yes</td>
</tr>
<tr>
<td>March 5, 2020</td>
<td>- Stationary - Audio</td>
<td>- Dominique - Leah - Miguel - Mx. Beetes - Naomi</td>
<td>Garmin 360° camera ran out of storage space; the participants moved positions and are not clearly visible on the stationary video</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Table 3.3 Interview type, participant, and date.

<table>
<thead>
<tr>
<th>Interview Type</th>
<th>Participant</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pragmatic</td>
<td>Mx. Beetes</td>
<td>January 20, 2020</td>
</tr>
<tr>
<td>Think-aloud</td>
<td>Mx. Beetes</td>
<td>April 1, 2021</td>
</tr>
<tr>
<td>Video-cued</td>
<td>Molly Drummond</td>
<td>October 29, 2021</td>
</tr>
<tr>
<td>Video-cued</td>
<td>Dexter Gordon</td>
<td>October 30, 2021</td>
</tr>
<tr>
<td>Video-cued</td>
<td>Jane Funda</td>
<td>November 19, 2021</td>
</tr>
</tbody>
</table>
Table 3.4 Chart of first and second cycle coding processes and example codes.

| RQ1 - How did the kindergarten students and a music teacher engage in social music interactions during harmonic improvisation activities? |
|---|---|---|
| **Round** | **Code Type** | **Example Codes** |
| First | In Vivo | “Listen to Mrs. Ukulele.” “I value your musical voice.” |
| | Process | Looking at Mx. Beetes Volunteering to improvise |
| | Descriptive | Students following teacher model Displaying behaviors that indicate they are not listening |
| Second | Pattern | Playful activities Honoring sounds through echoing |

| RQ2a - What music characteristics did kindergarten students and a music teacher exhibit during harmonic improvisation activities? |
|---|---|---|
| **Round** | **Code Type** | **Example Codes** |
| First | Process | Singing improvisation in harmonic context Chanting improvisation |
| | Provisional | Rhythm improvisation Resting tone |
| Second | Pattern | Similarity to teacher model Improvising rhythms on the bassline |

| RQ2b - How did kindergarten students and a music teacher exhibit music characteristics during harmonic improvisation activities? |
|---|---|---|
| **Round** | **Code Type** | **Example Codes** |
| First | In Vivo | “Harmonic awareness” “Most mature” |
| | Descriptive | Changing model to influence students’ improvisation vocabulary Progression of behavior and music sounds over time |
| Second | Pattern | Participants consistently display characteristic improvisations Teacher has recognizable music improvisation vernacular |
Dissertation Design

Figure 3.1 Graphic visualization of the embedded multiple-case study design.
Figure 3.2 Data analysis flow chart.
CHAPTER 4
FINDINGS REGARDING SOCIAL MUSIC INTERACTIONS
AND MUSIC CHARACTERISTICS

I identified five primary themes regarding the guiding research questions. Following are those five themes in relation to the corresponding research question:

1. The kindergarten students and Mx. Beetes engaged in a serve and return music community. (RQ1)

2. Mx. Beetes facilitated harmonic improvisation activities using a flexible activity sequence and macro-level and micro-level teaching structures. (RQ1)

3. Mx. Beetes’ vocal music improvisations included singing within the established music context, predictable phrasing, and repetition. (RQ2a)

4. Kindergarten students’ vocal music improvisations included singing, chanting, and other sounds that the adult participants perceived as conforming and not conforming to the established music context. (RQ2a)

5. The kindergarten students and Mx. Beetes improvised using personal improvisation vocabularies and personal vocal music improvisation characteristics. (RQ2b)

This chapter comprises descriptions of each theme using quotes from Mx. Beetes’ think-aloud interview, quotes from the early childhood music development specialists’ video-cued interviews, and excerpts of video- and audio-recorded data with their corresponding music transcriptions.
Theme One: The Kindergarten Students and Mx. Beetes Engaged in a Serve and Return Music Community

To build young children’s language abilities, adults and young children engage in responsive, social interactions during which one party verbally or nonverbally initiates, or serves, an interaction and the other party reciprocates, or returns, the interaction by acknowledging, interpreting, repeating, or developing the served interaction (Center on the Developing Child, 2022; Reynolds & Burton, 2017). During serve and return language interactions, adults share focus with young children and encourage sustained interaction until the children proceed to another activity. Similarly, the kindergarten students and Mx. Beetes engaged in serve and return music interactions. During serve and return music interactions, adults and young children engage in music conversations using vocalizations, body language and facial expressions, and movements (Reynolds and Burton, 2017). By playfully returning young children’s served music, adults may enhance young children’s music development; augment their music learning; and encourage music self-efficacy, self-expression, and ownership.

Serving and Returning Music Ideas during Social Music Interactions

Serve and return music interactions comprise a type of social music interaction. For the purposes of this dissertation, I considered all nonverbal and verbal communication that incorporated or related to the music context or harmonic improvisation activity as types of social music interactions. The types of social music interactions that the early childhood music development specialists referred to included eye contact, smiling, body language, facial expressions, imitation, spoken and sung directions, singing and rhythmic chanting, playing the ukulele, cueing kindergarten
students to perform their vocal music improvisations, taking deep breaths before singing, and modeling behaviors and vocal music improvisations. While engaging in social music interactions by serving and returning each other’s music ideas, Mx. Beetes and the kindergarten students shared joint music attention, engaged in music play and playful music vocalizations, filled purposeful silences with music vocalizations, sustained their music attention, and modified the music environment (Arrasmith, 2018; Hicks, 1993; Hornbach, 2007; Hubbell, 2016; McNair, 2010; Reardon, 2009; Valerio et al., 1998). Throughout the data collection period, the kindergarten students demonstrated comfort and confidence while creating sounds and improvising, and Mx. Beetes “validated and gave importance to each of their ideas” (Mx. Beetes, think-aloud interview, 2021). She considered music a “fluid entity” rooted in social music interaction, and she considered learning and performing other persons’ notated music compositions boring compared to the freedom and self-expression of improvisation (Mx. Beetes, think-aloud interview, 2021). She enjoyed learning about the kindergarten students’ music preferences and music strengths during vocal music improvisation activities, such as Miguel’s penchant to perform syncopated rhythms.

Mx. Beetes did not want to “restrict” the kindergarten students’ music self-expression or to “limit” the music ideas they expressed (Mx. Beetes, think-aloud interview, 2021). She had more music training and academic knowledge than the kindergarten students, but she believed that the kindergarten students benefited more from guiding their own music learning than from being guided by a music teacher. Mx. Beetes stated,
Improvisation allows them to have their own [voices], and I think that’s important. … It’s also revealing of where they’re at musically, like when we have one student who’s always [performing] rhythmic [sounds]. If I were to restrict [their sounds] to what I wanted, I would be limiting them heavily on where they could go. And that feels like the opposite of what a teacher should do. … The reality is, especially with spontaneous improvisation where I did not plan to do an improvisation, [I] go where the [kindergarten students] take [me]. (Mx. Beetes, think-aloud interview, 2021)

She used her experiences and her knowledge to facilitate the kindergarten students’ exploration, to help the kindergarten students cultivate their unique music voices, and to ensure the kindergarten students felt their music ideas were valuable and important. By cultivating a serve and return music community, the kindergarten students and Mx. Beetes freely engaged in music conversation, constructed a unique music culture, and developed their own personal improvisation styles.

The early childhood music development specialists noted that Mx. Beetes had a broad definition of improvisation (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021). Dexter, Molly, and Jane agreed that music improvisation generally comprises creating new music ideas within a specific framework, whereas music creativity comprises creating new music ideas without a specific framework (Gordon, 2012; Kratus, 1991, 1995; Reese, 2007). Although the purpose of the harmonic improvisation activities was to increase the kindergarten students’ abilities to create melodies within a harmonic framework, Mx. Beetes allowed the kindergarten students many opportunities for free
improvisation. Those free improvisations often became the basis of their serve and return music interactions. Mx. Beetes adamantly stated, “Important factors to me are creating and different. To define improvisation would be, probably, to make something different. We can always turn something into a musical idea” (Mx. Beetes, think-aloud interview, 2021). She considered the kindergarten students’ willingness to create music sounds, their comfort, and their confidence foundational aspects of their music development. By engaging in serve and return music interactions, she provided the kindergarten students the freedom to engage in music conversations, to generate a variety of music ideas, and to take ownership over their music development.

The Center on the Developing Child (2022) listed five steps adults may follow to engage children in serve and return interactions. The authors recommended adults,

- “Notice the serve and share the child's focus of attention,”
- “Return the serve by supporting and encouraging,”
- “Give it a name,”
- “Take turns…and wait. Keep the interaction going back and forth,” and
- “Practice endings and beginnings.” (The Center on the Developing Child, 2022)

The following subheadings outline the social music interactions and serve and return music interaction processes in which the kindergarten students and Mx. Beetes engaged in relation to those serve and return steps outlined by the Center on the Developing Child (2022). To illustrate those serve and return music interactions in the following subsections, I describe behaviors and sounds demonstrated by the kindergarten students and Mx. Beetes during the harmonic improvisation activity on January 23, 2020.
Appendix I comprises a complete music transcription of those serve and return music interactions.

**Noticing the Serve.** When the kindergarten students volunteered music ideas, Mx. Beetes displayed nonverbal social music interactions, such as making eye contact, raising her eyebrows, smiling, and leaning toward the kindergarten students. After Mx. Beetes sang greetings to the ukulele, most kindergarten students repeated her sung music vocalizations (Appendix I). Miguel, however, sang “Good!” on a sustained low pitch and rhythmically chanted “Good! Good! Good! Good!” over four macrobeats after Mx. Beetes sang “How are you today?” twice. While he rhythmically chanted, Mx. Beetes turned her body toward Miguel. She simultaneously leaned toward him, smiled, raised her eyebrows, and made eye contact to acknowledge that he had contributed to the music environment. After Mx. Beetes asked the question a third time, Naomi rhythmically chanted “Sweet! Sweet! Sweet! Sweet!” over four macrobeats, and she later responded to the question’s final repetition by sighing “Good!” using a sustained sound that fell from a high pitch to a low pitch. Mx. Beetes similarly noticed Naomi’s music serves using nonverbal social music interactions through body language.

Dexter perceived that those nonverbal social music interactions indicated that Mx. Beetes listened to the kindergarten students and demonstrated interest in their music ideas (Dexter Gordon, video-cued interview, 2021). During the harmonic improvisation activities, the kindergarten students and Mx. Beetes shared music focus when they listened to each other’s vocal music improvisations, shared social music interactions when they repeated each other’s music sounds and improvised together during group
improvisations, and shared music understanding when they recognized that Mx. Beetes repeated their music sounds (McNair, 2010).

**Returning the Serve.** After Mx. Beetes noticed the kindergarten students’ serves, she continued to communicate shared attention using body language. She engaged in vocal social music interactions, such as imitating the kindergarten students’ music ideas and responding with her own music ideas. Often, she repeated the kindergarten student participants’ music ideas or used elements of their music ideas to create new music ideas. By repeating or modifying music ideas, Mx. Beetes acknowledged and honored the kindergarten students’ music self-expression (Bartel & Cameron, 2007). For example, Mx. Beetes returned Miguel’s and Naomi’s music serves using repetition (Appendix I). During those serve and return music interactions, Mx. Beetes imitated their music vocalizations without modification by rhythmically chanting “Good! Good! Good! Good!” and “Sweet! Sweet! Sweet! Sweet!” and by sighing a sustained “Good!” from a high pitch to a low pitch.

In this serve and return music community, the kindergarten students and Mx. Beetes fluidly adopted the roles of initiator, modifier, and sustainer during their social music interactions (Arrasmith, 2018). The kindergarten students initiated pretend play and serve and return music interactions, they modified the music contexts by volunteering sounds that did and did not conform to the established music context, and they sustained activities by continuing to volunteer sounds and by repeating others’ sounds. Mx. Beetes initiated the harmonic improvisation activities, modified the kindergarten students’ sounds to fit within the established music context or to become musically relevant in a new context, and sustained attention through playfulness and

**Connecting Music Concepts.** As they engaged in serve and return music interactions, Mx. Beetes reinforced a variety of tonalities, meters, and types of vocal music improvisations. Although she rarely labeled those concepts using music vocabulary words, Mx. Beetes and the kindergarten students experienced an immersive music environment and engaged in music communication. As illustrated in Appendix I, the kindergarten students and Mx. Beetes engaged in imitation, improvisation, individual performance, group performance, rhythmically chanting, and vocal exploration.

**Waiting and Taking Turns.** Dexter remarked that Mx. Beetes “encouraged noises of all kinds,” “validated the noises of the students,” and “encouraged them to imitate other students’ noises” (Dexter Gordon, video-cued interview, 2021). Throughout the harmonic improvisation activities, Mx. Beetes engaged the kindergarten students in social music interactions by using purposeful silences and nonverbal communication, and she validated their sounds through repetition. When she left purposeful silences after those repetitions, other kindergarten students often imitated her repetition. After singing each greeting to the ukulele, Mx. Beetes left purposeful silences during which kindergarten students repeated these sung greetings and volunteered their own music vocalizations (Appendix I). She also left purposeful silences after she returned Miguel’s and Naomi’s music serves. Sometimes one kindergarten student filled a purposeful silence with a music vocalization, and sometimes many kindergarten students performed their music vocalizations simultaneously during a purposeful silence.
Mx. Beetes incorporated various types of silences throughout each lesson to elicit the kindergarten students’ responses (Willing, 2009). She believed that “space [through purposeful silences] was imperative because without the space, they are not prompted to fill it [with sound]” (Mx. Beetes, think-aloud interview, 2021). The more purposeful silences she created, the more the kindergarten students became comfortable filling the silences with their own music ideas (Mx. Beetes, think-aloud interview). She left purposeful silences after which the kindergarten students imitated her sounds, which comprised tonal patterns and rhythm patterns, sung phrases, and repetitions of the kindergarten students’ sounds (Hornbach, 2007; Willing, 2009). Although the kindergarten students rarely imitated each other during those social music interactions, they often imitated Mx. Beetes’ imitations of other kindergarten students’ sounds. The kindergarten students also made sounds during organizational silence, which comprised moments when Mx. Beetes waited for the kindergarten students to be quiet, collected her thoughts, or attended to a kindergarten student’s needs (Willing, 2009). As she continued to intentionally incorporate purposeful silences, Mx. Beetes noticed that the kindergarten students began to volunteer their music ideas without the purposeful silence prompt. As they gained that comfort, Mx. Beetes began to modify their music ideas and to “reimagine [their sounds] in a more elaborate music context” (Mx. Beetes, think-aloud interview, 2021). During the serve and return music interaction in Appendix I, Mx. Beetes did not use verbal instructions to ask for the kindergarten students’ music vocalizations. Using their understandings of the serve and return music environment, Miguel, Naomi, and other kindergarten students volunteered music vocalizations during Mx. Beetes’ purposeful silences.
Signaling the end. Mx. Beetes routinely used two types of cues to signal the end of a serve and return music interaction. The first type of cue occurred when the kindergarten students enthusiastically and loudly volunteered free improvisation music sounds (Reese, 2007) at the same time. Mx. Beetes displayed several types of nonverbal social music interactions concurrently; she waited several seconds, smiled at the kindergarten students, looked at them, took a deep breath, and redirected their attention to another aspect of the harmonic improvisation activity by speaking or singing directions. For example, the class repeated Mx. Beetes’s return of Naomi’s sighed “Good!” (Appendix I). Soon after their repetition, Mx. Beetes ended the serve and return music interactions by delivering spoken instructions.

The second type of cue occurred after a vocal music improvisation ended. Using a type of verbal social music interaction, Mx. Beetes initiated an affirmation chant (Figure 4.1) after her vocal music improvisation models, silently audiated vocal music improvisations, group vocal music improvisations, and individual kindergarten student’s vocal music improvisations. The kindergarten students often performed the affirmation chant with her. Sometimes they performed loudly and energetically, and sometimes they performed quietly and listlessly. Mx. Beetes used the affirmation chant to engage the kindergarten students in social music interactions, to focus their attention, and to positively reinforce their vocal music improvisations without using value-based language (Mx. Beetes, think-aloud interview, 2021).

Incorporating Playfulness and Pretend Play

Playfulness and pretend play infused each lesson. Mx. Beetes noted that, when they felt like they were engaging in play rather than in formal instruction, playfulness
encouraged the kindergarten students to pay attention and to participate (Mx. Beetes, think-aloud interview, 2021). She valued playfulness in the classroom and stated, “I want them to feel comfortable in this big sandbox of sound. It’s almost like the flamboyant nature of playfulness gets them on board [with participating in the activity]” (Mx. Beetes, think-aloud interview, 2021). Playful social music interactions included body language, nonverbal communication, and vocal inflection that enhanced engagement and promoted a positive environment. Mx. Beetes smiled at the children, talked using a high and light tone, and used facial expressions to draw the kindergarten students’ attention into the social music interactions and the harmonic improvisation activities.

Mx. Beetes enjoyed facilitating pretend play, stories, or games and then allowing the kindergarten students to “take us someplace else” (Mx. Beetes, think-aloud interview, 2021). They shared the playful, socially interactive music environment and “built the story together” (Mx. Beetes, think-aloud interview, 2021). The kindergarten students and Mx. Beetes engaged in two socially interactive pretend play scenarios during the harmonic improvisation activities, which comprised (a) pretending the ukulele was alive and (b) pretending to sleep while improvising. At the beginning of each harmonic improvisation activity, Mx. Beetes introduced the activity by singing a greeting to the ukulele. The kindergarten students and she pretended that the ukulele was alive by addressing it as Mrs. Ukulele and by asking it questions about its well-being. In the harmonic improvisation activity’s tonal context and meter context, Mx. Beetes sang melodic variations of the phrases “Hello, Mrs. Ukulele,” and “How are you today?” The kindergarten students demonstrated social music interactions by repeating Mx. Beetes’ sung phrases and by responding with their own answers to her questions. Those socially
interactive vocal music responses included rhythmically chanted sounds, vocal inflection sounds, and sung sounds with words.

Rather than discouraging them from interjecting sounds during class, Mx. Beetes encouraged the kindergarten students to volunteer their own music ideas. Mx. Beetes reinforced their sounds through repetition, and the other kindergarten students often imitated her repetition. Regarding reinforcement through social music interactions, Mx. Beetes noted how repetition alerted the kindergarten students that she noticed their music serves and that they felt validated by her music returns. She stated,

They recognize that you stole their idea. And then you get a smile, or sometimes a bashful look … and then the whole class starts doing it. And then that’s not all on me. Having all the other kids doing the same thing, too, that they just did. It’s like a double reinforcement of, “I heard you. They all heard you. And we approve of it because we’re doing it together.” So, I’m not the only one validating [their music vocalizations]. My kiddos are helping validate each other … which then also reinforces that security and safety in the classroom. When you have a whole group of people that acknowledge you, that’s powerful. (Mx. Beetes, think-aloud interview, 2021)

For example, after Mx. Beetes sang “How are you today?” in major tonality and duple meter, Miguel rhythmically chanted “Good! Good! Good! Good!” on four macrobeats (Appendix I). Mx. Beetes playfully repeated his rhythm chant, and the other kindergarten students repeated Mx. Beetes. Soon after, Naomi similarly rhythmically chanted “Sweet! Sweet! Sweet! Sweet!” which first Mx. Beetes and then the other kindergarten students repeated. After Miguel’s and Naomi’s rhythmically chanted interjections, the room burst
into a cacophony of sound. The kindergarten students volunteered a variety of noises at the same time while Mx. Beetes watched, listened, displayed playful body language and facial expressions, and waited for their music vocalizations to quiet.

The kindergarten students pretended to sleep during several harmonic improvisation activities. Mx. Beetes often allowed the kindergarten students to lie down during class rather than insisting that they sit upright (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021; Mx. Beetes, think-aloud interview, 2021). She prioritized freedom, movement, and autonomy over traditional posture to minimize physical restriction and to encourage movement while vocally improvising (Mx. Beetes, think-aloud interview, 2021). When they lay down, some kindergarten students yawned and stretched, which initiated the pretend play scenario (Arrasmith, 2018). Molly noticed that Naomi initiated the pretend play scenario by making eye contact with Mx. Beetes and saying, “It’s nighttime!” (Molly Drummond, video-cued interview, 2021). Molly connected the initiation to the kindergarten students’ previous participation in a pretending-to-sleep-and-wake-up game, their prone posture during the activity, and their playful classroom culture. Mx. Beetes also initiated the pretend sleep scenario when she perceived that the kindergarten students lacked energy and felt tired. In her reflections, she wrote, “They seemed tired, worn out, and unenthused. I asked how they were doing, commenting that they looked tired. Three or four children yawned. I decided that we should nap and still improvise” (Mx. Beetes, written reflections, 2020). Rather than abandoning the harmonic improvisation activity, Mx. Beetes used pretend play to sustain their interest in their social music interactions and to respond to their immediate physical needs.
**Minimal Direct Instruction**

After watching the serve and return interaction in Appendix I, Dexter mused, “She [Mx. Beetes] repeated a student, and then a student repeated her. And there’s not a direct instruction at that moment, but perhaps a culture has evolved” (Dexter Gordon, video-cued interview, 2021). Mx. Beetes never directly asked the kindergarten students to make sounds, but the kindergarten students learned that they could make sounds freely and that Mx. Beetes would often use their sounds in the activity. Similarly, Mx. Beetes rarely asked the kindergarten students not to make sounds. As she modeled a vocal music improvisation, Jane and Dexter observed that several kindergarten students began to sing their own vocal music improvisations (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021). Mx. Beetes corrected that behavior by saying, “My turn, just me,” twice and then saying the name of a kindergarten student who was singing with her, but she did not continue to reinforce the expectation that they listen to her without singing along (Jane Funda, video-cued interview, 2021). Mx. Beetes provided a framework by playing a chord progression on the ukulele; however, she did not explicitly instruct the kindergarten students to sing, to improvise a melody that fit the harmonic progression, or to perform their improvisations with any direct guidelines.

Mx. Beetes recognized that young children needed to display certain behaviors in academic settings, such as sitting upright, following directions, and knowing when to speak; however, she considered those social school behaviors of secondary importance to fostering the kindergarten students’ intentional music expression (Mx. Beetes, think-aloud interview, 2021). She brushed aside certain behaviors, such as “speaking out of turn or being too loud” (Mx. Beetes, think-aloud interview, 2021). She stated,
It wasn’t as big of a concern to me because my priority was to bring them back into the musical context. My first thought [when a young child speaks out of turn] is, “why is that child not interested in what I’m doing? How can I adjust my behavior to make it more interesting for them?” … I want the kids to feel like they can interject the musical idea. Sometimes we had a student who would do something [that] could be considered musical but was meant to get a laugh. And I wouldn’t stop them from doing that, but I would quickly follow up. … I just said, “now can you sing that?” Cuz I let them sing- say their piece. I didn’t want to shut them down. But I wanted to reinforce that we were doing something with musical intention rather than for a laugh. (Mx. Beetes, think-aloud interview, 2021)

In their classroom, music interjections became a normal aspect of their serve and return music community. Mx. Beetes utilized a variety of social music interactions to ensure that the kindergarten students made sounds “for a musical purpose” and “to make them want to do something musical rather than disruptive because what we’re doing is so interesting that they don’t need to create their own distraction” (Mx. Beetes, think-aloud interview, 2021). She repeated contextual music sounds, she modified non-contextual music sounds to match the established music context, and she used ideas from non-contextual music sounds to modify the music context (Mx. Beetes, think-aloud interview, 2021).

Jane remarked,

It [the harmonic improvisation activity] was incredibly broad. Like, there weren’t a whole lot of guidelines on [directions, such as] “sing a different song from me.” She really didn’t give a lot of, like, [explicit instructions, such as] “this is what
your song needs to have.” She didn’t really do any of that. She never really explicitly gave an instruction at the beginning. It definitely allowed for different amounts of freedom within the [kindergarten students’ vocal music improvisations] It really allows for, like, true … improvisation … when you don’t have a lot of guidelines, and you can kind of sort of take a step back and let the students [make their own sounds]. (Jane Funda, video-cued interview, 2021)

The early childhood music specialists interpreted that Mx. Beetes’ intended the kindergarten students to perform melodies within the harmonic context, to listen to her vocal music improvisation models and to other kindergarten students’ vocal music improvisations, and to participate actively in the harmonic improvisation activities (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021); however, Mx. Beetes rarely provided the kindergarten students explicit instructions or established specific social music behavior expectations during the harmonic improvisation activities (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021). During his video-cued interview, Dexter intentionally began to replace the words *instruct* and *directions* with the word *encourage* (Dexter Gordon, video-cued interview, 2021). He perceived those encouragements as the nonverbal and verbal social music interactions Mx. Beetes used to model wanted behaviors. As the kindergarten students and Mx. Beetes engaged in the harmonic improvisation activities, they developed a unique classroom culture of unspoken guidelines and minimal direct instruction.

Mx. Beetes incorporated narration, suggestions, concise directions, and questions throughout the harmonic improvisation activities. She sometimes narrated what she did,
such as saying, “Mrs. Ukulele has a song to share with us,” before playing the chord progression or stating, “I’m going to sing with Mrs. Ukulele now,” before she modeled a vocal music improvisation. The early childhood music development specialists interpreted those narrations as Mx. Beetes’ attempt to encourage the kindergarten students’ attention to specific social music behaviors (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview). Dexter remarked, “She told the students what she was doing. She did not tell the students what they would be doing” (Dexter Gordon, video-cued interview, 2021). When she stated that she would improvise with the ukulele, she wanted the kindergarten students to know that she would improvise a melody using a singing voice, that her vocal music improvisation would follow the chord progression, and that the kindergarten students should listen to her model (Mx. Beetes, think-aloud interview, 2021). Those narrations, however, were not explicit instructions, and the kindergarten students often sang their own improvisations when Mx. Beetes modeled vocal music improvisations (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021).

Mx. Beetes used both suggestions and concise directions to encourage specific behaviors and social music interactions. Suggestions comprised gently phrased instructions, such as, “You can close your eyes if you want,” and, “I think a good way to show would be a finger on your chin if you have an idea and you want to share it.” Concise directions comprised short, explicit instructions or commands with direct verbs, such as, “Audiate,” and, “Sing your song out loud.” Mx. Beetes primarily used spoken suggestions when addressing the entire kindergarten class at the beginning of harmonic improvisation activities, after she modeled a vocal music improvisation, and after a group
vocal music improvisation. She rarely insisted that the entire kindergarten class display specific behaviors, and the suggestions served as general guidelines for how the kindergarten students may choose to participate in social music interactions.

Mx. Beetes spoke and sang concise directions to address unwanted behaviors, to reinforce specific social music interactions, and to cue kindergarten students’ vocal music improvisations. Although she allowed the kindergarten students to choose when to make sounds and how to participate in social music interactions, she corrected kindergarten students when they engaged in unwanted behaviors, such as playing with each other’s hair or trying to touch the Garmin 360° camera (Mx. Beetes, think-aloud interview, 2021). Regarding social music interactions and music behaviors, Mx. Beetes encouraged the kindergarten students to silently audiate their improvisations while she played the chord progression, to listen to her model and to other kindergarten students’ vocal music improvisations, and to indicate they wanted to improvise individually by silently placing a finger on their chins. Before individual kindergarten students improvised, she sang phrases, such as, “Here [kindergarten student’s name] sings,” and, “Ready, steady, here you sing,” in the harmonic improvisation activities’ music contexts.

To redirect social music interactions and to enhance the kindergarten students’ comfort, Mx. Beetes asked the kindergarten students questions. She never asked kindergarten students who did not volunteer to improvise individually. She asked questions, such as, “Who has a musical idea?” and waited for the kindergarten students to put their fingers on their chins. By asking and waiting, she fostered self-efficacy and encouraged the kindergarten students to volunteer when they felt safe and comfortable (Bartel & Cameron, 2007). Occasionally, she asked the kindergarten students to
incorporate specific music behaviors into their vocal music improvisations, such as asking, “Can you sing that for me?” after a kindergarten student loudly chanted his rhythm improvisation and, “Are you ready to sing that for me on your ‘buh-buhs’ [neutral syllable vocables]?” after a kindergarten student began her improvisation with words. Mx. Beetes inconsistently redirected those types of behaviors, and she always used a gentle question instead of an explicit demand.

**Modeling Vocal Music Improvisations**

Mx. Beetes served the kindergarten students several models of vocal music improvisations during the harmonic improvisation activities. After the kindergarten students listened to the chord progression, Mx. Beetes improvised a melody in the established tonality, meter, and harmonic context. During her vocal music improvisations, she modeled a singing posture with an erect spine, some continuous fluid movement, and eye contact (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021). Molly noted that Mx. Beetes was “obviously a more skilled improviser than the students,” due to the quality and music characteristics of her vocal music improvisation models (Molly Drummond, video-cued interview, 2021). She remarked that, “Improvisation is clearly something that can be practiced so that you can be more comfortable. I think she’s a good model for the students because I think she does vary her improvisations so that they’re different sounding” (Molly Drummond, video-cued interview, 2021). Mx. Beetes’ ability to improvise fearlessly and consistently may have impacted the kindergarten students’ social music interactions, vocal music improvisation abilities, comfort, and confidence.
Honoring and Supporting Kindergarten Students’ Music Ideas

Molly noted that Mx. Beetes honored the kindergarten students’ sounds through repetition, through social music interactions and serve and return music interactions, and by allowing the kindergarten students to exhibit a variety of music sounds during the harmonic improvisation activities (Molly Drummond, video-cued interview, 2021). On occasion, Mx. Beetes gently “redirected” the kindergarten students’ sounds by asking them to use a singing voice or vocables instead of words to encourage them to follow her vocal music improvisation model (Molly Drummond, video-cued interview, 2021). Jane also noticed that Mx. Beetes honored the kindergarten students’ responses “whether or not they’re singing them, or whether they’re just chanting them” while watching the serve and return music interaction found in Appendix I (Jane Funda, video-cued interview, 2021). Imitating the kindergarten students’ rhythms and inflections, Mx. Beetes repeated Miguel’s four macrobeat “Good! Good! Good! Good!” rhythm chant and Naomi’s high vocal siren (Jane Funda, video-cued interview, 2021).

Although most kindergarten students eagerly volunteered to improvise individually, some kindergarten students required emotional support or music support to perform vocal music improvisations on their own. When Mx. Beetes perceived that the kindergarten students felt uncomfortable improvising on their own or needed additional accompaniment, she offered to sing with them (Mx. Beetes, think-aloud interview, 2021; Jane Funda, video-cued interview, 2021). On those occasions, Mx. Beetes sang simple rhythms or sustained tones using the root notes of the chord progression. She knew that the most important aspect of the harmonic improvisation activities comprised the chord progression over which the kindergarten students and she improvised (Mx. Beetes, think-
aloud interview, 2021). She wrote, “Whenever I would improvise with a student, I usually would try to sing the roots of the chords. As to not interrupt what they want to do melodically. And to fit in with their context” (Mx. Beetes, written reflections, 2020). By singing the root notes of the chord progression, she cultivated the kindergarten students’ abilities to hear the harmonic progression, to develop their singing voices, and to improvise with minimal additional support.

**Emergent Social Music Environment**

Mx. Beetes expressed awe at the kindergarten students’ creativity, their silliness, their abilities to explore the world with play, their comfort engaging in social music interactions, and their willingness to create sounds with abandon. During her think-aloud interview, she stated with wonder and joy in her voice, “I think that one of the most interesting and fascinating things about little kids is how much they can transform your world with their small ideas” (Mx. Beetes, think-aloud interview, 2021). As the kindergarten students and Mx. Beetes engaged in their twice weekly music classes, they developed an emergent social music environment that evolved based on their immediate needs and future needs in social and music contexts. Mx. Beetes considered herself a guide and a follower rather than a teacher or leader. She wanted to share the music space with the kindergarten students to cultivate their social music interactions and their ownership over the music environment (Mx. Beetes, think-aloud interview, 2021). She said, “I felt like I was responding more than anything else. And that they were making the rules, and I was following them while giving them a structure” (Mx. Beetes, think-aloud interview, 2021).
Reflecting on the classroom environment she cultivated with the kindergarten students, Mx. Beetes wrote, “We have been working to build a sense of a safe community in the classroom” (Mx. Beetes, written reflections, 2020). Safety comprised an integral aspect of Mx. Beetes’ teaching philosophy. She strived to foster an environment in which the kindergarten students felt that they could make sounds and engage in social music interactions without fear of ridicule or fear of making a mistake. The early childhood music development specialists perceived the safety of that serve and return community through the kindergarten students’ willingness to make sounds that did and did not conform to the established music context, to modify and to sustain the music context through sound-making, and to interject their sounds throughout the activity (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021). Molly noticed that, when Mx. Beetes asked them to improvise as a group, each kindergarten student attempted to improvise, and she perceived that the kindergarten students felt comfortable improvising in a whole group setting (Molly Drummond, video-cued interview, 2021).

Because the early childhood music development specialists watched video-recorded excerpts and listened to audio-recorded excerpts that spanned the entire data collection period, they noticed slight changes in the classroom environment and the participants’ social music interactions between January 23, 2020 and March 5, 2020. They perceived that the kindergarten students and Mx. Beetes had established a routine during harmonic improvisation activities, that the kindergarten students gained understandings of Mx. Beetes’ social music expectations and social music interactions,
and that the kindergarten students demonstrated developing musicianship during the harmonic improvisation activities.

**Theme Two: Mx. Beetes Facilitated Harmonic Improvisation Activities Using a Flexible Activity Sequence and Macro-Level and Micro-Level Teaching Structures**

The kindergarten students and Mx. Beetes engaged in harmonic improvisation activities at the end of music class. For example, they had 12 minutes to improvise at the end of the first data collection session, and they had 70 seconds to improvise at the end of the fourth data collection session. Regardless of the time they had to improvise, Mx. Beetes established a flexible activity framework, a macro-level teaching structure, and micro-level teaching structures.

**Flexible Harmonic Improvisation Activity Framework**

In her reflections, Mx. Beetes wrote, “The usual [framework] we have during these jam sessions is 1) they listen to the progression, 2) I model the improvisation, 3) they audiate their improvisation, 4) they perform as a group, and 5) individuals volunteer to sing their [vocal music improvisations]” (Mx. Beetes, written reflections, 2020). Molly and Jane identified that same framework, and Dexter considered the harmonic progression that Mx. Beetes played on the ukulele as a fundamental aspect of the framework (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021). As I analyzed the video-recorded data, I observed that Mx. Beetes frequently introduced the activity with a social music interaction by singing a greeting to the ukulele and that she often asked the kindergarten students to silently audiate their vocal music improvisations while she
played the harmonic progression. I determined the flexible harmonic improvisation activity framework as follows:

1. Introduction – Mx. Beetes introduced the harmonic improvisation activity by playfully singing a greeting to the ukulele.
2. Harmonic Context – Mx. Beetes played the harmonic progression on the ukulele while the kindergarten students listened.
3. Teacher Model – Mx. Beetes played the harmonic progression on the ukulele and modeled a vocal music improvisation while the kindergarten students listened.
4. Silent Audiation – Mx. Beetes played the harmonic progression on the ukulele, and the kindergarten students and she audiated their own vocal music improvisations.
5. Group Improvisation – Mx. Beetes played the harmonic progression on the ukulele, and the kindergarten students and she performed vocal music improvisations.
6. Individual Improvisation – Mx. Beetes played the harmonic progression on the ukulele, and individual kindergarten students volunteered to perform their own vocal music improvisations.

Mx. Beetes purposefully established those six elements to attend to the kindergarten students’ social music needs. In her reflections, Mx. Beetes noted that she did not skip the teacher model element even when several kindergarten students improvised with her (Mx. Beetes, written reflections, 2020). Although she wondered if those kindergarten students no longer needed to hear her vocal improvisation model, she wrote, “I believe [the teacher model] is still necessary for some of the students. I don’t
want to skip things that they need. It [listening to the teacher model] is not taking anything away from the children who are more comfortable with improvisation” (Mx. Beetes, written reflections, 2020). Mx. Beetes highly valued the kindergarten students’ pretend play and music ideas, but she also recognized that they required guidance as they developed their music understandings and acquired music skills through social music interactions. During her interview, she joked, “I wanted to make sure they got a well-rounded improvisational experience rather than taking only their input. Because that’s important and valuable, but I also have a degree (laughs) in music education” (Mx. Beetes, think-aloud interview, 2021). She used her extensive knowledge of early childhood music development and the flexible activity framework to facilitate what she considered developmentally appropriate music learning.

While they engaged in the harmonic improvisation activities, the kindergarten students and Mx. Beetes engaged in playful social music interactions and pretend play scenarios. Mx. Beetes intentionally incorporated pretend play scenarios to encourage the kindergarten students’ attention and participation (Mx. Beetes, think-aloud interview, 2021). She continued to follow the kindergarten students’ leads regarding playfulness, and she altered the harmonic improvisation activity framework to attend to their needs. If they became unfocused, she added another group improvisation to regain their attention. If few kindergarten students volunteered to improvise individually, she modeled another vocal music improvisation or called on a kindergarten student to improvise a second time. If they only had two minutes to improvise, she only engaged the kindergarten students in the harmonic context, teacher model, and group improvisation elements.
Although no two video-recorded harmonic improvisation activities were identical, they all contained several elements of the harmonic improvisation activity framework. Mx. Beetes omitted and repeated those six elements based on the kindergarten students’ social music needs, the kindergarten students’ attention, and the time available to improvise. During the first data collection session on January 23, 2020, the kindergarten students and Mx. Beetes engaged in an 11-minute-long harmonic improvisation activity (Figure 4.3). Throughout those 11 minutes, Mx. Beetes incorporated all six elements and repeated the group improvisation and individual improvisation elements. Between most elements, Mx. Beetes provided minimal direct instruction using spoken and sung narration, suggestions, concise directions, and questions.

Mx. Beetes had three minutes left to improvise during the fifth data collection session on February 20, 2020 (Figure 4.4). On that day, she briefly introduced the activity, established the harmonic context, and provided two teacher models of vocal music improvisation because the kindergarten students talked and sang during that element. Before Mx. Beetes asked them to improvise as a group, Leah raised her hand and, unprompted, began to sing an individual vocal music improvisation. After Leah’s spontaneous vocal music improvisation, the kindergarten students and Mx. Beetes practiced three group improvisations. Mx. Beetes ended the activity by calling on Naomi to sing her own vocal music improvisation. Like the first data collection video recording, Mx. Beetes incorporated minimal direct instruction between each element. Both video-recorded harmonic improvisation activities included the introduction, harmonic context, teacher model, group improvisation, and individual improvisation elements of the harmonic improvisation activity framework; however, Mx. Beetes omitted the silent
audiation element on February 20, 2020. Although the activities differed in length and elements, they both comprised recognizable and flexible harmonic improvisation activity framework.

**Teaching Structures**

Mx. Beetes applied macro-level and micro-level teaching structures within the flexible harmonic improvisation activity framework. The macro-level teaching structure comprised the order of the flexible harmonic improvisation activity framework. The micro-level teaching structures comprised the ways Mx. Beetes facilitated vocal music improvisations during each element of the flexible harmonic improvisation activity framework.

**Macro-Level Teaching Structure.** As I discussed previously, Mx. Beetes used the elements of the flexible harmonic improvisation activity framework to meet the kindergarten students’ social music needs while also adapting the framework to each day’s time constraints. If utilized in sequential order, the elements moved from a broad focus to a narrow focus (Figure 4.5). Mx. Beetes used the introduction and the harmonic context elements to transition from the previous music activity and to focus the kindergarten students’ attention on the harmonic improvisation activity. During the teacher model and silent audiation elements, she provided structured wait-time, reinforced the harmonic progressions’ tonality and meter, and gave the kindergarten students opportunities to audiate their vocal music improvisations. They practiced their vocal music improvisations during the group improvisation element, and they performed their vocal music improvisations during the individual improvisation element. Mx. Beetes repeated elements to broaden the harmonic improvisation activity’s focus and to redirect
the kindergarten students’ attention, such as initiating the group improvisation element after several individual improvisation elements. She also omitted elements to change the scope of focus and to account for short harmonic improvisation activity opportunities. When she omitted the group improvisation and individual improvisation elements, the focus remained broad, and she could engage the kindergarten students in a truncated harmonic improvisation activity during the last two minutes of class.

**Micro-Level Teaching Structures.** Within each element, Mx. Beetes demonstrated distinct teaching structures intended to focus the kindergarten students’ attention, to provide social music behavior guidance, and to facilitate the kindergarten students’ vocal music improvisation self-efficacy. Those micro-level teaching structures primarily comprised types of social music interactions. When Mx. Beetes initiated the introduction element, she established the tonality by playing the tonic chord on the ukulele and singing phrases in tonality, and she incorporated purposeful silences during which the kindergarten students repeated her sung phrases and volunteered music ideas. During the harmonic context, teacher model, silent audiation, group improvisation, and individual improvisation elements, Mx. Beetes spoke narrations, suggestions, and concise directions to communicate her expectations of the kindergarten students’ social music behaviors. After communicating broad expectations, such as, “Let’s listen,” and, “I wonder who has a music idea they could share,” she cued the kindergarten students using specific sung phrases. She frequently sang a descending tonic triad or music context’s tonic and subtonic pitches when providing those cues. Before group improvisation and individual improvisation elements, she often sang a version of the phrase, “Here you sing,” and demonstrated taking an audible breath. Because she rarely deviated from those
sung cue structures, the kindergarten students knew to begin their improvisations as she
played the first chord of the harmonic progression.

Mx. Beetes began each element of the flexible harmonic improvisation activity
framework by speaking or singing directions, she sustained each element by engaging the
kindergarten students in social music interactions that reinforced the element’s main
purpose, and she ended each element by either initiating the affirmation chant or
beginning the next element. During the harmonic improvisation activity on January 23,
2020 (Figure 4.6), Mx. Beetes began the individual improvisation element by singing,
“Put your finger on your chin if you have a music song that you want to share,” on the
resting tone. After seeing Dominique show the signal, she sang, “Here, Dominique,” on a
descending tonic triad. She sustained the element by playing the ukulele while
Dominique performed her individual vocal music improvisation. After Dominique
finished, Mx. Beetes initiated the affirmation chant. She quickly initiated a repetition of
the individual improvisation element by singing, “Another idea,” on the leading tone.

Jane observed that Mx. Beetes modeled playful social music interactions and
sound effects, such as lip trills and popping sounds, while telling the kindergarten
students to turn on their listening ears and to close their eyes (Jane Funda, video-cued
interview, 2021). Mx. Beetes had used those playful social music interactions and sound
effects to initiate the teacher model element. After she performed her vocal music
improvisation model, Mx. Beetes used those same playful social music interactions and
sound effects to suggest the kindergarten students open their eyes and to end the teacher
model element. Some micro-level structures, such as volunteering to improvise
individually by placing a finger on their chins, became ingrained aspects of the harmonic
improvisation activity. Mx. Beetes consistently reminded the kindergarten students signal their willingness to volunteer by placing their fingers on their chins, but the kindergarten students often had their signals at the ready before she gave the direction.

**Macro-Level and Micro-Level Teaching Synthesis.** The macro-level and micro-level teaching structures became predictable aspects of the harmonic improvisation activities, and the kindergarten students and Mx. Beetes developed cultural understandings regarding social music interactions and vocal music improvisations. Molly observed that during the introduction element, the kindergarten students “really know what was supposed to happen during that silence, which was for them to echo her” (Molly Drummond, video-cued interview, 2021). Mx. Beetes never explicitly instructed the kindergarten students to repeat her sung greetings to the ukulele; however, the kindergarten students transferred their social music interaction understandings regarding purposeful silences to the introduction activity.

Jane noted that, “[Mx. Beetes kept] that [harmonic improvisation activity] routine pretty much the same so that they understand what is expected of them, what those procedures are” (Jane Funda, video-cued interview, 2021). Even when the flexible harmonic improvisation activity framework changed, the kindergarten students understood the macro-level and micro-level teaching structures Mx. Beetes utilized. They developed the abilities to predict the harmonic improvisation activities’ elements, to participate in all elements of the framework, and to develop a unique and socially interactive vocal music improvisation culture as part of their serve and return music community and emergent social music environment.
Theme Three: Mx. Beetes’ Vocal Music Improvisations Included Singing Within the Established Music Context, Predictable Phrasing, and Repetition.

Mx. Beetes performed several vocal music improvisations during each harmonic improvisation activity. After listening to several of her vocal music improvisations, Dexter perceived that her melodies had “predictable harmonic structures” and “the same pattern of contour, both rhythmically and structurally” (Dexter Gordon, video-cued interview, 2021). By performing predictable and similar vocal music improvisations, Mx. Beetes established herself as a reliable and skillful model of improvisation (Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021). Because she rarely used explicit instruction to refine the kindergarten students’ vocal music improvisations, Mx. Beetes communicated her improvisation expectations through her vocal music improvisation models.

Rhythm Characteristics

Mx. Beetes used syncopations and elongations in each vocal music improvisation model she performed. She particularly favored variations on the 3+3+2 syncopation in common time. Figure 4.7 comprises music notation of two vocal music improvisations she performed during a group improvisation element. Throughout both melodies, she used the 3+3+2 syncopation in nearly every measure. The same pattern saturates the vocal music improvisation models in Figure 4.2, Figure 4.7, Figure 4.8, Figure 4.9, Figure 4.10, Figure 4.12. She sometimes sang rhythms that crossed the bar line, such as the second vocal music improvisation model in Figure 4.7, but she primarily limited her rhythm motives to one measure.
**Tonal Characteristics**

Molly noted that Mx. Beetes demonstrated more leaps, more variety of motives, and a larger range than the four kindergarten student participants demonstrated (Molly Drummond, video-cued interview, 2021). Mx. Beetes’ improvisations conformed to the tonal and harmonic contexts. Many of her improvisations comprised the range of a sixth, usually from 1 to 6 or 7 to 5 (Figure 4.7, Figure 4.8, Figure 4.9, Figure 4.10, Figure 4.11). When she demonstrated a range larger than a sixth, she tended to sing within an octave (Figure 4.7, Figure 4.12). The only vocal music improvisation model during which Mx. Beetes sang beyond an octave range (Figure 4.2) was the group improvisation during which she noticed the kindergarten students were split-second imitating her melody (Mx. Beetes, written reflections, 2020; Mx. Beetes, think-aloud interview, 2021).

Mx. Beetes demonstrated melodies that moved stepwise, that leapt from one chord root to another at chord changes, and that arpeggiated pitches in a chord triad. Her melodies frequently began and ended on the tonic pitch. She consistently performed vocal music improvisations that fit the tonality and harmonic context, but she occasionally disrupted the predictable tonal structure by incorporating neighbor tones, anticipations, and suspensions (Figure 4.2, Figure 4.7, Figure 4.11). Jane stated that Mx. Beetes incorporated rhythmic variation and melodic variation without “overly embellishing” her melodies (Jane Funda, video-cued interview, 2021). By demonstrating simple melodies with predictable characteristics and limited ranges, Mx. Beetes served and returned strong examples of vocal music improvisations during harmonic improvisation activities.
Theme Four: Kindergarten Students’ Vocal Music Improvisations Included
Singing, Chanting, and Other Sounds That the Adult Participants Perceived as Conforming and Not Conforming to the Established Music Context

Mx. Beetes provided the kindergarten students with opportunities to choose how they participated in the harmonic improvisation activities and how they demonstrated their vocal music improvisation abilities (Mx. Beetes, think-aloud interview, 2021; Jane Funda, video-cued interview, 2021). Although Mx. Beetes wanted the kindergarten students to develop their abilities to improvise a melody with a harmonic progression, she honored their sounds whether they sang familiar melodies, rhythmically chanted syncopated rhythms with inflection, incorporated words, or improvised contextual melodies (Mx. Beetes, think-aloud interview, 2021). Jane felt that Mx. Beetes embodied the phrase, “I value your musical voice” (Jane Funda, video-cued interview, 2021).

Throughout the harmonic improvisation activities, the kindergarten students had opportunities to listen to Mx. Beetes model vocal music improvisations, to audiate their own vocal music improvisations, and to improvise in a group and individually. Mx. Beetes provided them with a variety of opportunities to hear and to perform vocal music improvisations; however, she offered minimal direct instruction regarding how the kindergarten children performed their vocal music improvisations. Whereas Mx. Beetes modeled vocal music improvisations that fit the harmonic improvisation activities’ music contexts, the four kindergarten student participants’ vocal music improvisations inconsistently followed the teacher’s model. Mx. Beetes and the early childhood music development specialists regarded sung vocal music improvisations that followed the harmonic progression, included vocables instead of words, and began and ended with the
chord progression as conforming to the established music context. Mx. Beetes and the early childhood music development specialists perceived the four kindergarten student participants’ rhythmically chanted improvisations, familiar songs, and vocal music improvisations that continued after the chord progression ended as not conforming to the established music context.

**Rhythm Characteristics**

Each of the four kindergarten student participants’ vocal music improvisations included rhythm characteristics that conformed to the harmonic improvisation activities’ meters. Molly perceived the kindergarten students’ vocal music improvisations as rhythmically driven rather than tonally driven (Molly Drummond, video-cued interview, 2021). The kindergarten students used syncopated rhythms similar to the 3+3+2 pattern that Mx. Beetes frequently performed (Figure 4.13, Figure 4.14, Figure 4.15, Figure 4.16, Figure 4.17, Figure 4.18). Miguel performed highly syncopated rhythms that resembled Mx. Beetes’ elongated rhythms and syncopations across bar lines (Figure 4.19, Figure 4.20). Mx. Beetes and the early childhood music development specialists noticed that the kindergarten students’ rhythms sounded similar to the folk strum pattern (Figure 4.21) that Mx. Beetes often played on the ukulele (Dexter Gordon, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021; Mx. Beetes, think-aloud interview, 2021).

**Tonal Characteristics**

Tonal characteristics comprised pitches the four kindergarten student participants performed during sung vocal music improvisations and vocal inflections they performed during rhythmically chanted vocal music improvisations. Most of the kindergarten
students’ sung vocal music improvisations began and ended on the resting tone of the harmonic context, which mirrored Mx. Beetes’ vocal music improvisation models (Molly Drummond, video-cued interview, 2021). When the kindergarten students sang their vocal music improvisations, they demonstrated limited ranges of a fifth or smaller. Their vocal music improvisations often centered around the chord roots of the harmonic chord progression (Dexter Gordon, video-cued interview, 2021; Mx. Beetes, think-aloud interview, 2021). Regarding one of Dominique’s vocal music improvisations, Dexter commented that she sang in the harmonic context, demonstrated melodic contour, grounded her melody on the resting tone, and seemed to imitate the rhythm of Mx. Beetes’ folk strum pattern (Dexter Gordon, video-cued interview, 2021).

During rhythmically chanted vocal music improvisations, the kindergarten students demonstrated tonal music characteristics through vocal inflection instead of singing pitches (Molly Drummond, video-cued interview, 2021). Mx. Beetes and the early childhood music development specialists specifically commented on Miguel’s inflection during his rhythmically chanted vocal music improvisations. During his vocal music improvisations, Miguel often rhythmically chanted repetitive vocal inflections that accented his syncopated rhythms. Mx. Beetes described his improvisations as being “in the pocket,” and Jane thought it was, “Really cool that he’s just kind of using all of these different syllables to express [himself]” (Jane Funda, video-cued interview, 2021; Mx. Beetes, think-aloud interview, 2021).

**Contextual and Non-Contextual Vocal Music Improvisations**

Mx. Beetes remarked that, “It’s so impressive how willing these children are to come up with [vocal music improvisations]. And for the most part, it’s all within the
context!” (Mx. Beetes, think-aloud interview, 2021). At various points, each of the four kindergarten student participants sang a vocal music improvisation that included rhythm motives and pitches that followed the harmonic improvisation activities’ chord progression. They demonstrated harmonic awareness when they used the same harmonic functions as Mx. Beetes to create contextual vocal music improvisations different from Mx. Beetes. Mx. Beetes and the early childhood music development specialists considered “clear beginnings and endings” important aspects of contextual vocal music improvisations (Dexter Gordon, video-cued interview, 2021).

Dexter noticed that both Leah and Naomi performed songs (Figure 4.15, Figure 4.22) that he perceived as composed music (Dexter Gordon, video-cued interview, 2021). Regardless of how the songs aligned with the harmonic improvisation activities’ music contexts, he considered those vocal music responses rather than “strictly improvisation” because the kindergarten students were “relying on [their] imitation [vocabularies]” (Dexter Gordon, video-cued interview, 2021). Jane also perceived Leah’s possibly composed vocal music response as non-contextual because it included words and did not align to the chord progression (Jane Funda, video-cued interview, 2021). Mx. Beetes and the early childhood music development specialists perceived Miguel’s vocal music improvisations as the least contextual because he primarily rhythmically chanted his music ideas instead of singing rhythms that aligned with the harmonic improvisation activities’ chord progressions (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021; Mx. Beetes, think-aloud interview, 2021).
Molly perceived that the four kindergarten student participants were carefully listening to Mx. Beetes when they performed vocal music improvisations that mimicked her vocal music improvisation models (Molly Drummond, video-cued interview, 2021). They followed her melodic contour, engaged in split-second imitation, and imitated her syncopated rhythms. Molly and Jane both noted that the kindergarten students demonstrated strong audiation and understanding of “the harmonic language” because they started and ended their improvisations on the resting tone, used similar pitches and rhythms as Mx. Beetes demonstrated during her vocal music improvisation models, and followed the chord progression in their melodic contour (Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021). Additionally, the participants perceived the kindergarten students’ vocal music improvisation development from the first data collection session to the final data collection session. Over those six weeks, the kindergarten students performed vocal music improvisations that conformed to the harmonic improvisation activities’ music contexts, emulated Mx. Beetes’ vocal music improvisation models, and increasingly demonstrated their music skill acquisition and vocal music improvisation vocabulary development (Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021; Mx. Beetes, video-cued interview, 2021).

**Theme Five: The Kindergarten Students and Mx. Beetes Improvised Using Personal Improvisation Vocabularies and Personal Vocal Music Improvisation Characteristics**

Mx. Beetes commented that the four kindergarten student participants’ vocal music improvisations were very different from each other’s, stating, “But it’s interesting
that as such young musicians they have characteristic voices within their improvisations” (Mx. Beetes, think-aloud interview, 2021). After watching and listening to their vocal music improvisations, Mx. Beetes, the early childhood music development specialists, and I noticed that the four kindergarten student participants and Mx. Beetes displayed their own vocal music improvisation styles. Those personal improvisation styles developed from their music experiences, music vocabularies, music preferences, and music development stages.

**Recognizable Improvisation Vocabularies**

Because the kindergarten students and Mx. Beetes had an extensive shared music history and shared music understanding (Hubbell, 2016), they also had a shared music vocabulary. Mx. Beetes purposefully incorporated a variety of music activities, music contexts, and music contents to augment the kindergarten students’ shared music vocabulary (Gordon, 2012, 2013; Mx. Beetes, think-aloud interview, 2021; Valerio et al., 1998). She reflected on how they used their shared music vocabulary to improvise, writing, “They had prior knowledge to draw from. There didn’t seem to be a lot of copying going on, either. I liked it a lot. Made me proud” (Mx. Beetes, written reflections, 2020). Molly commented that she thought, “[The kindergarten students were] all in very different places [in their music development], and that’s ok. And they are taking the idea of being different in their own ways. They were improvising in their own ways” (Molly Drummond, video-cued interview, 2021). By helping the kindergarten students develop their music skills and shared music vocabularies, Mx. Beetes intended to broaden their abilities to create their own vocal music improvisations and to express their unique music ideas (Bartel & Cameron, 2007).
Personal Improvisation Characteristics

Mx. Beetes cultivated an environment in which the kindergarten students freely volunteered their own music ideas and revealed their music preferences and music skills. She recalled that, “There were characteristic improvisations they would all carry out consistently” (Mx. Beetes, think-aloud interview, 2021). The following subheadings comprise notable aspects of the four kindergarten student participants’ and Mx. Beetes’ personal improvisation characteristics that Mx. Beetes, the early childhood music development specialists, and I perceived.

Mx. Beetes. During her think-aloud interview, Mx. Beetes reflected on her own vocal music improvisation models. She thoughtfully stated,

It’s interesting hearing myself improvise. And where I want [my vocal music improvisation] to go, that’s exactly where I end up going. Even though I don’t remember this [vocal music improvisation], and I’m making it up on the spot? But the fact that I hear myself, and I’m like, “Oh I’m probably going to go to the third at the cadence.” It’s interesting. I can recognize this…kind of, like, my musical vernacular. Things that I use frequently. (Mx. Beetes, think-aloud interview, 2021)

Mx. Beetes also reflected on her vocal music improvisation development during her think-aloud interview. She remembered feeling uncomfortable making mistakes while pursuing her bachelor’s degree in music education. She began to develop her vocal music improvisation abilities when she began to teach young children; she learned to “sing random songs,” to give herself permission to make mistakes, and to play instruments she “wasn’t good at” (Mx. Beetes, think-aloud interview, 2021). When she “switched over
from thinking about being a music teacher to musically playing with the kids,” she finally felt comfortable improvising and making sounds with young children (Mx. Beetes, think-aloud interview, 2021).

The early childhood music development specialists considered Mx. Beetes a skilled improviser (Dexter Gordon, video-cued interview, 2021; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021). She readily improvised for and with the kindergarten students, and she modeled contextual vocal music improvisations that the kindergarten students emulated. As stated previously, Mx. Beetes’ vocal music improvisations included variations on the 3+3+2 rhythm syncopation, melodic ranges from a sixth to an octave, and melodic contours that outlined key pitches of the chord progressions. Mx. Beetes primarily used stepwise and arpeggiated motion, and she occasionally embellished her melodies with neighbor tones, anticipations, and suspensions. Figure 4.7 comprises a quintessential example of Mx. Beetes’ vocal music improvisation style.

Dominique. Dominique’s vocal music improvisations included similar rhythm motives and melodic motives as Mx. Beetes’ vocal music improvisation models (Molly Drummond, video-cued interview, 2021). Molly wondered if “… she [Dominique] grabbed onto [Mx. Beetes’ vocal music improvisation models] and is taking something that she’s heard and kind of making it her own” (Molly Drummond, video-cued interview, 2021). Her vocal music improvisations consistently followed the harmonic progression that Mx. Beetes played on the ukulele. Molly noticed that Dominique often sang pitches that followed the bassline, and Jane noticed that Dominique often returned to
the resting tone while she sang (Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021).

**Leah.** Leah frequently “felt the need to create elaborate melodic improvisations” (Mx. Beetes, think-aloud interview, 2021). She consistently used a singing voice while she performed her vocal music improvisations, and she often included words and word-like vocables (Mx. Beetes, think-aloud interview, 2021). She demonstrated strong tonal audiation ability when she volunteered to improvise and began to sing without waiting for Mx. Beetes’ cue or ukulele accompaniment (Figure 4.14).

**Miguel.** Of the four kindergarten student participants, Miguel incorporated the most rhythm chanting and performed rhythmically-driven, syncopated vocal music improvisations with inflection (Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021; Mx. Beetes, think-aloud interview, 2021). Like Leah, he also included words and word-like vocables in most of his vocal music improvisations (Molly Drummond, video-cued interview, 2021; Mx. Beetes, think-aloud interview, 2021). He only performed one vocal music improvisation that Mx. Beetes and the early childhood music development specialists considered a sung vocal music improvisation (Figure 4.20).

**Naomi.** Mx. Beetes considered Naomi’s improvisations the most mature of the four kindergarten student participants. Naomi “used a lot of harmonically accurate tonal patterns and improvisations” during her vocal music improvisations (Mx. Beetes, think-aloud interview, 2021). As she sang her vocal music improvisations within the harmonic improvisation activities’ music contexts, Naomi performed melodies that differed from
In addition to performing vocal music improvisations within the harmonic improvisation activities’ music contexts, Naomi frequently performed a recurring melody that she adapted to a variety of meters and tonalities (Figure 4.23) (Mx. Beetes, think-aloud interview, 2021). Dexter described that melody as a *safe melody*, which he defined as melodies that young children “feel comfortable with,” “can come back to” over time, and “can maybe even develop a little bit” from the original form (Dexter Gordon, video-cued interview, 2021). Although Mx. Beetes and the early childhood music development specialists did not consider Naomi’s safe melody a true type of harmonic improvisation, they noted that she modified her safe melody to a variety of music contexts and infused rhythm motives and melodic motives from her safe melody into her other improvisations (Dexter Gordon, video-cued interview, 2012; Jane Funda, video-cued interview, 2021; Molly Drummond, video-cued interview, 2021; Mx. Beetes, video-cued interview, 2021). Figure 4.15 comprises an example of Naomi performing a modified version of her safe melody.

Naomi’s most salient vocal music improvisations occurred during the final data collection session on March 5, 2020. Mx. Beetes allowed Naomi to improvise individually two times that day (Figure 4.16, Figure 4.18). Mx. Beetes and the early childhood music development specialists noticed that Naomi’s two vocal music improvisations shared many rhythm and tonal characteristics; however, she developed her second vocal music improvisation by reusing motives from her first vocal music
improvisation in the first phrase, embellishing the rhythms in her second phrase, and increasing her range and number of pitches in her second phrase.
Figure 4.1 Affirmation chant.

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Hoo!  Hah!  Hoo!*  
*Clap
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Figure 4.2 Fourth of four teacher models of vocal music improvisation performed on January 23, 2020.
Figure 4.3 Timeline of the harmonic improvisation activity from January 23, 2020.
Figure 4.4 Timeline of the harmonic improvisation activity from February 20, 2020.
Figure 4.5 Focus of the macro-level teaching structure.
Figure 4.6 Music transcription of micro-level teaching structures during an individual improvisation element.
Figure 4.7 Second and third of four teacher models of vocal music improvisation performed on January 23, 2020.
Figure 4.8 Teacher model of vocal music improvisation performed on February 27, 2020.
Figure 4.9 First of three teacher models of vocal music improvisation performed on March 5, 2020.
Figure 4.10 Second of three teacher models of vocal music improvisation performed on March 5, 2020.
Figure 4.11 First of four teacher models of vocal music improvisation performed on January 20, 2020.
Figure 4.12 Third of three teacher models of vocal music improvisation performed on March 5, 2020.
Figure 4.13 Individual vocal music improvisation performed by Dominique on January 23, 2020.
Figure 4.14 Individual vocal music improvisation performed by Leah on February 20, 2020.

*Mx. Beetes begins affirmation chant*
Figure 4.15 Individual vocal music improvisation performed by Naomi on February 20, 2020.

* Mx. Beetes begins affirmation chant here
Figure 4.16 First of two individual vocal music improvisations performed by Naomi on March 5, 2020.
Figure 4.17 Individual vocal music improvisation performed by Dominique on March 5, 2020.
Figure 4.18 Second of two individual vocal music improvisations performed by Naomi on March 5, 2020.
Figure 4.19 Individual vocal music improvisation performed by Miguel on January 23, 2020.
Figure 4.20 Individual vocal music improvisation performed by Miguel on March 5, 2020.
Figure 4.21 Folk strum pattern with a I-IV-V-I (D-G-A-D) bassline.
Figure 4.22 Individual vocal music improvisation performed by Leah on January 23, 2020.
Figure 4.23 Naomi’s recurring melody.
I have selected three vignettes that illuminate the kindergarten students’ and Mx. Beetes’ social music interactions and vocal music improvisations during harmonic improvisation activities. For each vignette, I introduce the salient themes, describe the event as interpreted from the video- and audio-recorded data, and provide commentary to detail the four kindergarten student participants’ and Mx. Beetes’ social music interactions and vocal music improvisations regarding the salient themes. Those three vignettes encompass aspects of all five themes discussed in Chapter 4.

**Vignette One: Mx. Beetes Introduces the Harmonic Improvisation Activity**

Vignette One comprises (a) serve and return music interactions as outlined in Theme One and (b) the introduction and harmonic context elements of the flexible harmonic improvisation activity framework as outlined in Theme Two. The kindergarten students and Mx. Beetes volunteered music sounds, imitated each other’s music sounds, and playfully greeted the anthropomorphized Mrs. Ukulele. Mx. Beetes established the harmonic improvisation activity’s broad focus by playfully introducing the activity and establishing the major tonality, duple meter, and I-IV-V-I harmonic progression music contexts. Appendix I comprises a complete music transcription of Vignette One.

**Vignette One**

The kindergarten students and Mx. Beetes sat in a circle on the floor. Mx. Beetes held her ukulele and sang, “Hello, Mrs. Ukulele!” on a descending melodic line. The
kindergarten students, wiggling in their spots, waved and repeated her sung greeting.
“How are you today?” sang Mx. Beetes. Again, the kindergarten students repeated her query. For the first time in this activity, Mx. Beetes accompanied the kindergarten students by playing V-I in major tonality and D keyality. A kindergarten student sitting near Mx. Beetes answered for the ukulele by playing IV-I and singing, “Good!” on a low note. Giggling, everyone imitated that kindergarten student’s answer while Mx. Beetes quickly strummed the V chord.


Mx. Beetes looked around the circle and strummed I-V-I on the ukulele while singing, “How are you today?” The circle erupted with sustained, sung sounds. Mx. Beetes joined in by singing “yah yah yah yahhhhh!” while vigorously strumming the V chord. Miguel sat on his knees and sang a loud, wobbling, “Ahhhhhhhh!” His voice cracked from one high pitch to the next. A little girl called out, “Stop it!” toward Miguel.

Mx. Beetes scanned the circle as she sang, “How are you today?” Some kindergarten students repeated the question in a singing voice, and some kindergarten students laughed as their peers made sounds. Once again, she sang, “Hello, Mrs.
Ukulele.” This time, the responses consisted primarily of low growls. Naomi’s sound, however, was a high, soaring, “Gooooooood!” as she stretched her arms above her head.

“Gooooood!” Mx. Beetes repeated Naomi’s sound, and the kindergarten students then repeated Mx. Beetes. She redirected their attention by saying, “Let’s listen to how Mrs. Ukulele sounds.” A few kindergarten students were still vocalizing squeaks and growls. “Turn on your listening ears.” She mimed turning up a volume control on her ears, and the kindergarten students matched her movements. “Turn down your talking.” They all pretended to turn down the volume control on their voices. Mx. Beetes paused while a few kindergarten students continued to make sounds.

“If you want, you can close your eyes!” Mx. Beetes made two popping sounds as she mimed closing first one eye and then the other eye. The kindergarten students copied her sound as they closed their eyes. After looking around the circle one more time, Mx. Beetes closed her eyes and played a I-IV-V-I chord progression twice in duple meter and major tonality. Two girls near her left laid down as if they were napping. “Open your eyes!” Mx. Beetes popped her eyes open, looked around the circle, smiled at the kindergarten students, and prepared them to silently audiate their own vocal music improvisations with Mrs. Ukulele.

**Commentary on Vignette One**

Vignette One occurred during the first data collection session and began the first minute and a half of an 11-minute-long harmonic improvisation activity. Mx. Beetes left purposeful silence after waving to the ukulele and singing a greeting, and the kindergarten students quickly filled that silence by repeating her sung greeting. She continued to ask Mrs. Ukulele, “How are you today,” and both Miguel and Naomi
interjected their own music answers to her query. Miguel’s “Good! Good! Good! Good!” and Naomi’s “Sweet! Sweet! Sweet! Sweet!” both filled the four macrobeats of purposeful silence left by Mx. Beetes. Noticing their music serves, Mx. Beetes made eye contact and returned their music sounds using imitation. Other kindergarten students then proceeded to imitate Mx. Beetes’ imitation of Miguel’s and Naomi’s music vocalizations.

At two points, the entire kindergarten class erupted in sound. Mx. Beetes again left several seconds of purposeful silence during which the kindergarten students volunteered their music sounds. They had established a music community in which they were allowed to make loud music sounds simultaneously, and Mx. Beetes encouraged their exploration through her purposeful silence. She used nonverbal communication to acknowledge the sounds, and she continued the introduction element as the kindergarten students’ music sounds began to quiet.

While she sang her greetings, Mx. Beetes periodically strummed the chords of the harmonic context. After the second eruption of sounds, she used a playful tone of voice to draw the kindergarten students’ attention to that harmonic context. She used suggestions and concise directions to encourage the kindergarten students to listen to the chord progression, and she continued to anthropomorphize Mrs. Ukulele. By providing purposeful silences throughout the introduction, she encouraged and honored the kindergarten students’ music self-expression. As she ended the introduction element and initiated the harmonic context element, Mx. Beetes utilized playfulness and play to create an environment in which the kindergarten students listened to the chord progression without interjecting their music sounds.
Vignette Two: Mx. Beetes Models Two Vocal Music Improvisations

In this short vignette, Mx. Beetes demonstrated (a) the teacher model element of the flexible activity framework as described in Theme Two, (b) contextual and predictable vocal music improvisations as described in Theme Three, and (c) personal vocal music improvisation characteristics as described in Theme Five. Similar to Vignette One, Mx. Beetes incorporated minimal direct instruction using narration, suggestions, and concise directions. Figure 5.1 comprises a music transcription of Vignette Two.

Vignette Two

Mx. Beetes sat up with a straight spine and said, “I'm going to make a song up with Mrs. Ukulele.” Then, she sang, “Here I go!” and improvised a melody in mixolydian tonality and duple meter. The kindergarten students bounced their shoulders as they watched and listened. A few kindergarten students improvised, as well, even though Mx. Beetes wanted them to listen first. She rhythmically chanted the affirmation strongly when they ended their improvisations, and the kindergarten students joined in with an enthusiastic “Hoo!” and a clap.

“Let's try that again so you can hear me,” she suggested, “so just listen.” A kindergarten student started to make some sounds, and Mx. Beetes looked at the student and calmly stated, “You can make up your song in a second.”

For a second time that day, Mx. Beetes improvised while playing the ukulele. While Mx. Beetes sang, most of the kindergarten students moved, clapped their hands, and created their own melodies. After Mx. Beetes finished her improvisation, the kindergarten students joined the rhythmically chanted affirmation.
Commentary on Vignette Two

Throughout the teacher model element of the flexible harmonic improvisation activity framework, Mx. Beetes performed contextual vocal music improvisation models in the established mixolydian tonality, duple meter, and I-I-VII-I harmonic progression music contexts. She signaled the end of both vocal music improvisation models by initiating the affirmation chant. Several kindergarten students talked and sang along with her while she improvised, and Mx. Beetes used the suggestion, “Let’s try that again so you can hear me,” and the concise direction, “Just listen,” to encourage them to listen silently.

Like each of her vocal music improvisations, Mx. Beetes’ two vocal music improvisation models comprised the 3+3+2 syncopated rhythm pattern (Figure 5.1). During the first vocal music improvisation model, she sang a range of a sixth from $\hat{7}$ (C) to $\hat{5}$ (A) and used stepwise motion with a flowing melodic contour. She ended the improvisation with one syncopated rest at the beginning of the final measure before her melody’s final resting tone. Her second vocal music improvisation model comprised a melodic motive that repeated in the first half of both phrases. She included a small leap at the end of the first phrase, and the ending of the second phrase was identical to the ending of her first vocal music improvisation model. She demonstrated contextual vocal music improvisations and consistent personal vocal music improvisation styles throughout both vocal music improvisation models.
Vignette Three: Miguel Sings His Vocal Music Improvisation, and Naomi Has Two Turns to Improvise Individually

The third and final vignette comprises (a) a pretend play scenario as described in Theme One, (b) the individual improvisation element of the flexible harmonic improvisation activity framework as described in Theme Two, (c) micro-level teaching structures as described in Theme Two, (d) contextual and non-contextual improvisations as described in Theme Four, and (e) the kindergarten students’ personal vocal music improvisation characteristics as described in Theme Five. Mx. Beetes provided several opportunities for the kindergarten students to improvise individually during the harmonic improvisation activity. Miguel volunteered to perform once, and Naomi eagerly volunteered to perform a second time. Appendix J comprises a music transcription of Vignette Three.

Vignette Three

The kindergarten students seemed tired, so Mx. Beetes let them lay down and pretend they were taking a nap. Smiling at the sleepy kindergarten students, the teacher turned her attention toward Naomi. “Naomi’s turn. Here she sings!” Mx. Beetes accidentally played the wrong chord (E major), and Naomi matched the first pitch of her melody with this chord. Mx. Beetes quickly corrected herself by changing to the tonic chord (D major), and Naomi locked her melody into the day’s tonality.

Naomi often remembered melodies that she improvised during other classes. Sometimes she made changes to those melodies, and sometimes she sang the melody the same way multiple times. During this class, she used similar rhythms during both phrases of her improvisation with some small embellishments in the melody. She sang her first
phrase using the roots of the tonic and subtonic chords, and she embellished the beginning of her second phrase with the fifth of the tonic chord. Mx. Beetes smiled, quietly rhythmically chanted the affirmation, and continued onto the next kindergarten student. She sang, “Go back to sleep, Naomi. Miguel's turn! Ready, steady, here he sings.”

Miguel loved to create rhythm chants and other music sounds throughout class. He often led free improvisation activities by emphatically repeating a rhythm phrase or calling out the name of an animal. He also sang quietly into the microphone clipped to his shirt collar while other kindergarten students improvised on their own. In fact, Mx. Beetes had just quietly leaned over and whispered “Shhh…” when she noticed that he was singing during another kindergarten student’s turn to improvise individually. As he performed his vocal music improvisation, Miguel created a highly rhythmic melody that sometimes abandoned the established tonality. Occasionally, the pitches he sang did not match the chord progression. He performed his first phrase strongly for his classmates, and he sang the second phrase only to himself. Mx. Beetes played the final chord, but Miguel’s improvised ending did not feel final. It seemed like he could have kept singing his rhythmic melody for quite a while longer. Mx. Beetes rhythmically chanted the affirmation chant, and Miguel joined in on the final, quiet “ooo!”

There was enough time for one more kindergarten student to improvise, and Naomi quickly raised her hand. “Naomi, do you want another turn?” Mx. Beetes asked gently. Naomi had already improvised once that day, and Mx. Beetes usually did not call on the same kindergarten student twice during the same day’s harmonic improvisation activity.
“Yes!” stated Naomi while nodding her head once. Naomi seemed so confident in her wish to improvise again that Mx. Beetes decided to break the unspoken guideline and to allow Naomi another individual improvisation opportunity.

Mx. Beetes sang, “Ready? Naomi. Here she sings,” and began to play the chord progression one last time. Naomi’s improvised melody was different from her previous vocal music improvisation. She added in passing tones and increased her melody’s range. For a few seconds, Naomi did not sing in the established tonality. She knew that melodic idea did not fit with the chord progression, and she returned to the idea in the second phrase with different pitches that fit the context.

After one final affirmation chant for Naomi, Mx. Beetes stood up and ended class. Leaving out some words for the kindergarten students to fill in, Mx. Beetes initiated their lining up song. “Let's move in a...in a... Let's move in a...” The kindergarten students sang the missing word, “line,” and the last phrase, “and it goes this way.” They repeated the song in the same way while walking into line, and Mx. Beetes vigorously strummed the last chord on her ukulele to end the day’s lesson.

**Commentary on Vignette Three**

Vignette Three concluded the harmonic improvisation activity during the final data collection session. In the final minutes of the class, Mx. Beetes narrowed the focus of the harmonic improvisation activity to the individual improvisation element. She allowed several kindergarten students to perform their vocal music improvisations and, for the only time during the data collection period, allowed a kindergarten student to improvise individually two times. The kindergarten students had demonstrated low energy that day, and Mx. Beetes used cues from their body language to initiate a pretend
play scenario during which they laid down on the floor and pretended to nap. Naomi and Miguel sat upright when they improvised, and Mx. Beetes reminded them to pretend to go back to sleep after they performed their individual improvisations.

Within the individual improvisation element, Mx. Beetes used several micro-level teaching structures. She had already reminded the kindergarten students to put their fingers on their chins if they wanted to perform their vocal music improvisations, and she did not repeat that concise direction toward the end of the harmonic improvisation activity. She sang a phrase to cue the kindergarten students to sing, she played the harmonic progression while they performed their vocal music improvisations, and she ended each individual improvisation element by initiating the affirmation chant and reminding them to pretend to sleep. She then initiated the next individual improvisation element by using verbal communication and nonverbal communication to ask for volunteers.

Naomi’s first individual vocal music improvisation included the same 3+3+2 syncopation as Mx. Beetes’ vocal music improvisation models. She sang a range of a sixth from $\hat{7}$ (C) to $\hat{5}$ (A), included some large leaps at the beginning of phrases, and sang a melodic contour that followed the roots of the chord progression. She also included an anticipation of the tonic chord as the last two chords of each phrase moved from VII to I.

The first phrase of Miguel’s vocal music improvisation comprised rhythms and pitches that generally fit the harmonic context. He did not perform the 3+3+2 pattern, but he did perform syncopated rhythms that crossed the bar line. Although he sang a few pitches that did not fit the harmonic context, he used stepwise motion and small leaps that primarily outlined the chord progression. During the second phrase, however, his vocal
music improvisation did not fit the harmonic context. His rhythms remained syncopated, but these syncopations did not accent the first beat of each measure as did the first phrase. Melodically, he repeatedly sang the root of the tonic chord even when Mx. Beetes played the subtonic chord, and he ended his vocal music improvisation on a note that was not the resting tone and that did not fit the final tonic chord.

Mx. Beetes ended the harmonic improvisation activity, and she asked for one final volunteer. Noticing that most of the kindergarten students were pretending to sleep and not placing their fingers on their chins, she caught Naomi’s attention. Naomi confidently displayed the signal, and Mx. Beetes decided to allow her a second opportunity to improvise individually. She began her first phrase with the 3+3+2 syncopated rhythm, repetitive pitches, and stepwise motion. At the end of the first phrase, she sang a pitch that was neither the resting tone nor a chord tone. As she began the second phrase of her final individual improvisation, Naomi incorporated rhythm and pitch variations. She enhanced the syncopated rhythm at the beginning of the phrase by incorporating a rest. She developed her melodic contour using stepwise pitches, neighbor tones, small leaps, and one final emphasis of the tonic chord in the last measure. During those individual vocal music improvisations, Naomi demonstrated vocal music improvisation development and displayed quintessential characteristics of her personal improvisation style.
Figure 5.1 Music transcription of Vignette Two.
CHAPTER 6

SUMMARY, IMPLICATIONS, AND REFLECTION

In this study, I examined how kindergarten students and a music teacher engaged in social music interactions and displayed music characteristics during harmonic improvisation activities. The purpose of this study was (a) to describe social music interactions between kindergarten students and a music teacher and (b) to categorize and to describe kindergarten students’ and a music teacher’s vocal music improvisations during harmonic improvisation activities. The guiding research questions are as follows:

- **RQ1**: How did kindergarten students and a music teacher engage in social music interactions during harmonic improvisation activities?
- **RQ2a**: What music characteristics did kindergarten students and a music teacher exhibit during harmonic improvisation activities?
- **RQ2b**: How did kindergarten students and a music teacher exhibit music characteristics during harmonic improvisation activities?

Methodologies and Methods

Four kindergarten students and a music teacher participated in this qualitative research study. I purposefully selected those participants due to their engagement in social music interactions and their vocal music improvisations during harmonic improvisation activities (Patton, 2015; Yin, 2018). Although I initially designed this dissertation as an embedded, single-case study (Yin, 2018), I realized that qualitative bricolage (Kincheloe, 2001; Rogers, 2012) using embedded, multiple-case study (Yin,
2018) and video-cued ethnography methodologies (Adair & Kurban, 2019a, 2019b; Tobin, 2019) best suited the dissertation’s emerging needs. Three early childhood music development specialists participated in the video-cued interviews. Data collection comprised video- and audio-recorded data, written observations and reflections, interviews, and music transcriptions of the four kindergarten participants’ and Mx. Beetes’ vocal music improvisations. I engaged in several first and second cycle coding procedures to analyze the data (Saldaña, 2016). I engaged Mx. Beetes and the early childhood music development specialists in member checking procedures throughout the research process (Patton, 2015).

**Findings**

After analyzing the data, I found five themes regarding social music interactions and vocal music improvisations:

1. The kindergarten students and Mx. Beetes engaged in a serve and return music community. (RQ1)
2. Mx. Beetes facilitated harmonic improvisation activities using a flexible activity sequence and macro-level and micro-level teaching structures. (RQ1)
3. Mx. Beetes’ vocal music improvisations included singing within the established music context, predictable phrasing, and repetition. (RQ2a)
4. Kindergarten students’ vocal music improvisations included singing, chanting, and other sounds that the adult participants perceived as conforming and not conforming to the established music context. (RQ2a)
The kindergarten students and Mx. Beetes improvised using personal improvisation vocabularies and personal vocal music improvisation characteristics. (RQ2b)

I wrote three vignettes to illustrate those themes in context. In the following sections, I provide implications for early childhood music development specialists, policymakers, and researchers. I also suggest research agendas for myself and other early childhood music development researchers.

**Implications for Early Childhood Music Development Specialists**

Theme One comprised aspects of the serve and return music community. Mx. Beetes consistently reiterated her personal commitments to listening to the kindergarten students’ music vocalizations, to engaging the kindergarten students in harmonic improvisation activities, and to following the kindergarten students’ lead regarding play and music activities. If they do not already do so, early childhood music development specialists may consider incorporating social music interactions and serve and return music interactions into their music settings. They may enhance their students’ music development and music skill acquisition by serving and returning music ideas, sharing music attention, and developing shared music vocabularies.

In cultivating an improvisation-rich environment, Mx. Beetes provided opportunities for the kindergarten students to express themselves, to guide their own music development, and to share their music ideas. Early childhood music development specialists may create and develop harmonic improvisation activities like those Mx. Beetes facilitated. By doing so, they may enhance the ways they understand their students’ social and music development, develop music relationships with their students,
encourage music relationships among students, and foster music agency among all persons involved in those social music interactions. Mx. Beetes and the kindergarten students improvised in duple meter and in major and mixolydian tonalities during the data collection period, and Mx. Beetes chose these harmonic contexts to supplement the meters and tonalities experienced during other music activities. During harmonic improvisation activities, early childhood music development specialists may expand their students’ improvisation vocabularies by establishing harmonic contexts in a variety of meters and tonalities. As students continue to pursue informal and formal music experiences, they may benefit from their increased harmonic palette and use their music improvisation vocabularies in a variety of music-making contexts.

In Theme Two, I describe the flexible harmonic improvisation activity framework, macro-level teaching structure, and micro-level teaching structures that Mx. Beetes used. Early childhood music development specialists interested in incorporating harmonic improvisation concepts into their teaching may benefit from using the framework and teaching structures as described in Theme Two. The six elements of the flexible harmonic improvisation activity framework may enhance early childhood music development specialists’ abilities to deliver harmonic improvisation instruction to their students. Their students may benefit from the framework’s shift from the broad focus of transitioning into the harmonic improvisation activity to the narrow focus of performing individual vocal music improvisations. Early childhood music development specialists may adapt the macro-level teaching structure to their students’ needs. For example, some students may require several opportunities to silently audiate their improvisations before they feel comfortable performing one individual vocal music improvisation, whereas
other students may require one opportunity to silently audiate their improvisations and may feel comfortable performing several individual vocal music improvisations during one harmonic improvisation activity.

As early childhood music development specialists become increasingly comfortable enacting the flexible harmonic improvisation activity framework and macro-level teaching structure, they may use Mx. Beetes’ micro-level teaching structures to develop vocal music improvisation routines. For each element of the framework, they may hone their concise directions to initiate the element, cue students’ vocal music improvisation performances to sustain the element, and use specific positive reinforcement to end the element. By responding to their students’ social music interactions, music serves, and vocal music improvisation needs, early childhood music development specialists and their students may develop their own emergent serve and return music communities.

As described in Theme Five, the kindergarten students and Mx. Beetes demonstrated their personal improvisation styles through their vocal music improvisations. Early childhood music educators may consider frequently incorporating harmonic improvisation activities during their music classes. They may learn about their students’ stages of music development, music vocabularies, music preferences, music self-expression, and vocal music improvisation abilities. As students experience frequent opportunities to perform individual vocal music improvisations, they may augment their abilities to perform personally meaningful and contextual vocal music improvisations in a variety of music contexts. By engaging students in playful serve and return music interactions during harmonic improvisation activities, early childhood music
development specialists may support their students’ music self-efficacy and vocal music improvisation self-expression.

**Implications for Early Childhood Music Development Policymakers**

I describe Mx. Beetes’ personal vocal music improvisation development in Theme Five. As a preservice teacher, Mx. Beetes often felt uncomfortable performing vocal music improvisations. She credited her experiences engaging in play-based music development sessions with young children as the foundation of her comfort, confidence, and skill as an improviser. Early childhood music development policymakers may incorporate opportunities for preservice teachers to experience a variety of vocal music improvisation types (Reese, 2007) throughout their teacher preparation programs. Preservice teachers who vocally improvise frequently may develop their vocal music improvisation self-efficacy and may confidently engage their future students in a variety of vocal music improvisation experiences.

In addition to learning and performing composed music, students may benefit from creating their own music through vocal music improvisation. As they develop and revise early childhood music education standards, early childhood music development policymakers may incorporate aspects of serve and return music interactions, a variety of vocal music improvisation experiences, music self-efficacy, and music self-expression. They may integrate vocal music improvisation concepts and experiences into a variety of standards, such as using vocal music improvisation activities as precursors to composition, to experience vocal music improvisation styles from a variety of time periods and cultures, and to develop students’ singing voices.
Implications for Early Childhood Music Development Researchers

I created music transcriptions and timelines to enhance my understandings of the kindergarten students’ and Mx. Beetes’ social music interactions and vocal music improvisations during harmonic improvisation activities. Although I gained understandings by repeatedly watching and listening to their vocal music improvisations, I significantly deepened my understandings by transcribing their music sounds and creating timelines of the harmonic improvisation activities. For example, I became aware of the slight tempo changes, the rhythm motives, and the melodic motives that the four kindergarten participants and Mx. Beetes performed during their vocal music improvisations. Early childhood music development researchers may deepen their own understandings of young children’s vocal music improvisations by creating music transcriptions and timelines that represent their data. They may also use those music transcriptions and timelines to document young children’s vocal music improvisations, to communicate salient aspects of these vocal music improvisations, and to supplement vocal music improvisation phenomena in video- and audio-recorded data. After creating those music transcriptions, early childhood music development researchers may use their enhanced understanding of young children’s vocal music improvisations to customize the meters, tonalities, and harmonic progressions of harmonic music improvisation activities to further their music development and music vocabularies acquisition. Iterative music transcription may prove particularly helpful during longitudinal studies as researchers provide vocal improvisation opportunities in a variety of harmonic music improvisation contexts and document young children’s music development.
Early childhood music development researchers may continue to investigate parallels between music development and language development (Gordon, 2012, 2013; Reynolds & Burton, 2017; Reynolds et al., 2007; Valerio, 2005). Researchers have developed theories and applications of serve and return interactions to enhance young children’s social language development (Center on the Developing Child, 2022); Reynolds and Burton (2017) recommended early childhood music development specialists use these theories and applications to engage young children in serve and return music interactions and to enhance young children’s social music development. As discussed in Theme One, Mx. Beetes used serve and return music interactions to engage kindergarten students in social music interactions and vocal music improvisations during harmonic improvisation activities. Early childhood music development researchers may incorporate language development theories—and serve and return (Center on the Developing Child, 2022; Reynolds & Burton, 2017) in particular—as they examine young children’s social music interactions, music development, and music skill acquisition. Because chronological age and music age may not align (Gordon, 2012, 2013), researchers may consider applying language development theories to music acquisition and music understanding beyond early childhood.

Early childhood music development researchers who engage in qualitative methodologies enact incredibly complex study designs and data analysis procedures. Due to issues arising from the COVID-19 pandemic, the data collection period for this study abruptly ended halfway through the intended duration. I amended my guiding research questions and retooled the study’s design to suit the data at hand. Although I began this dissertation with an embedded single-case design (Yin, 2018), I grew to recognize that
the initial design did not adequately meet my research needs due to those extenuating circumstances. I incorporated other qualitative methodologies to support my analysis, to expand my findings, and to address multiple forms of credibility. Qualitative bricolage (Rogers, 2012; Kincheloe, 2001, 2005) became an essential aspect of this dissertation, and I may not have utilized this methodology without the extensive hardships brought on by the COVID-19 pandemic. As I continue to develop my understanding of qualitative bricolage and apply this methodology to my research, I recognize the potential impact of qualitative bricolage on early childhood music development research. Limited research exists regarding the teaching processes, social music interactions, and music characteristics of vocal music improvisations during harmonic improvisation activities. As early childhood music development researchers design and enact research studies, they may consider strengthening their design by integrating multiple qualitative methodologies through qualitative bricolage. They may engage in iterative methodological design processes to adapt their research studies to emergent needs regarding data at hand, analysis, and credibility.

**My Future Research Agenda**

I vastly enhanced my research self-efficacy by enacting this dissertation, and I set a foundation for further research regarding early childhood music development, social music interaction, and vocal music improvisation. I am deeply committed to furthering the scope of qualitative research in music education research. Methodologically, I will continue to utilize qualitative bricolage, case study, and video-cued ethnography to investigate early childhood music development phenomena, in addition to other
qualitative research methodologies and designs such as participatory action research and narrative inquiry.

I will design research studies that similarly investigate social music interactions and vocal music improvisations in other settings and with a variety of participants in local, national, and international contexts. By developing this dissertation’s design and findings further, I will enact additional research studies regarding the frameworks and teaching structures used by early childhood music development specialists during other music activities, such as music literacy activities and creative movement activities; the social music interactions and vocal music improvisations that occur during free improvisation, rhythm improvisation, tonal improvisation, and melodic improvisation (Reese, 2007); and serve and return music interactions (Reynolds & Burton, 2017) that occur in a variety of settings with young children who demonstrate a variety of music development stages (Gordon, 2013).

Video-cued ethnography, in particular, may comprise an important aspect of my future research. By engaging in video-cued ethnography similarly to Tobin’s (2019) investigations of preschool education across the globe, I may illuminate similarities and differences regarding social music interactions and vocal music improvisations in local, national, and global contexts and with early childhood music development specialists, young children, caretakers, and other stakeholders from a variety of cultural, geographic, music, and linguistic backgrounds. I am particularly interested in young children’s perceptions of their vocal music improvisation experiences and in adults’ perceptions of playful, socially interactive music environments. I will investigate the ways stakeholders express their own understandings of social music interactions and vocal music
improvisations through culturally familiar and culturally unfamiliar lenses. While engaging in those video-cued ethnographic research studies, I intend to collaborate with other early childhood music development researchers from cultural, geographic, music, and linguistic backgrounds that differ from my own.

**A Research Agenda for Early Childhood Music Development Researchers**

Early childhood music development researchers who study social music interactions and vocal music improvisations may replicate this study in other physical settings and with a variety of participants. By engaging in qualitative bricolage methodologies, they may impact other researchers’ understandings of its application to music education research and provide guidance regarding best practices in qualitative bricolage research. Regarding theoretical frameworks, researchers who engage in video-cued ethnographic research and researchers who engage in qualitative bricolage recommend researchers use this methodology to investigate power hierarchies (Adair & Kurban, 2019a, 2019b; Berry, 2011; Kincheloe, 2001, 2005; Rogers, 2012). Early childhood music development researchers who study critical approaches may investigate the ways participants and stakeholders perceive, enact, and replicate power dynamics in early childhood music development settings.

**Reflection**

As I set out to design, enact, and write this dissertation, I anticipated neither the breadth nor the depth of this research study. I have learned copious amounts of information about qualitative research methodologies while engaging in this research study, and I have used that vast knowledge to learn that even the smallest social music interactions, such as a smile, a deep breath to cue an eager students’ vocal music
improvisation, or a playfully whispered, “Let’s take a nap,” comprised indispensable aspects of the social music environment. I am captivated by the complexity of early childhood music development research and the complex social music interactions demonstrated by kindergarten students and their music teacher. Although this dissertation concludes my doctoral education, I will continue to investigate social music interactions and vocal music improvisations in early childhood music development settings, to examine the macro and micro elements of young children’s demonstrated music development and music skills, and to apply the findings to my own research and teaching practices.
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APPENDIX A

GLOSSARY OF TERMS

**Audiation** - hearing and understanding music in one’s own mind with or without the physical presence of music (Gordon, 2013)

**Convergent thinking** - thinking processes which result in one definitive and correct solution, answer, or response (Lewis & Lovatt, 2013)

**Diatonic** - patterns of whole and half steps that do not contain chromatic pitches, specifically those patterns found in Western music traditions (Gordon, 2013)

**Divergent thinking** - thinking processes which result in multiple solutions, answers, or responses; may align with definitions of creativity (Lewis & Lovatt, 2013)

**Exploration** - first stage of improvisation resulting in seemingly random sounds; may be perceived as lacking purpose or structure; equivalent to linguistic babble (Kratus, 1995)

**Fluid improvisation** - fourth stage of improvisation resulting in relaxed and automatic technique without thought to specific motor movements, the ability to perform in a variety of music structures and contexts, and the ability to improvise in response to changes in the music environment (Kratus, 1995)

**Free improvisation** - intentional and thoughtful music decisions; may include tonal, rhythm, harmonic, and/or stylistic aspects; no external parameters or structures imposed (Reese, 2007)
**Functional harmonic improvisation** - improvised music primarily based in the creation of pitches that align with the music context’s tonality and chord progressions; may include rhythm elements; metric, tonality, and harmonic functions provided by an outside source (Reese, 2007)

**Improvisation opportunities** - activities and situations in which participants have the opportunity to create and improvise music

**Melodic improvisation** - improvised music primarily based in the simultaneous creation of pitches and rhythms; may include repetition and motivic development; metric, tonality, and harmonic function contexts provided by an outside source; structure may be chosen by the improvisor (Reese, 2007)

**Melody** - combinations of tonal and rhythm music characteristics that may or may not include patterns, motives, or repetition (Gordon, 2013)

**Meter** - length, groupings, and divisions of macrobeats and microbeats (Gordon, 2013)

**Motivic development** - repeated tonal patterns and/or rhythm patterns within a single music event or from one music event to a related music event

**Music content** - tonal patterns and rhythm patterns (Gordon, 2013)

**Music context** - tonality, rhythm, and style (Gordon, 2013)

**Ostinato** - a short, repeated music pattern that contains rhythm, pitch, or both

**Pentatonic** - music that contains only five unique pitches; commonly found in patterns that omit half steps, leading tones, and chromatic pitches (Gordon, 2013)
**Personal improvisation** - seventh and ultimate stage of improvisation resulting in a new music style with its own structures and stylistic characteristics from which listeners may derive meaning (Kratus, 1995)

**Process-oriented improvisation** - second stage of improvisation resulting in connections between motor movement and produced music sounds; improvisers begin to incorporate intention into their music improvisation (Kratus, 1995)

**Product-oriented improvisation** - third stage of improvisation resulting in awareness of music and incorporation of familiar music structures; may allow others to understand intention and structure within the music (Kratus, 1995)

**Rhythm** - music characteristics define by microbeats, macrobeats, and rhythm patterns (Gordon, 2013)

**Rhythmic improvisation** - improvised music primarily based in the creation of microbeats, macrobeats, and rhythm patterns without discernible pitch or melody; metric contexts may be provided by an external source (Reese, 2007)

**Structural improvisation** - fifth level of improvisation resulting in the ability to use a variety of strategies to shape music structure, to enhance development, to create and to release tension, and to provide continuity from one music idea to the next (Kratus, 1995)

**Stylistic improvisation** - sixth level of improvisation resulting in the mastery of specific music style(s) through the integration of detailed and nuanced stylistic traits (Kratus, 1995)
**Tonal improvisation** - improvised music primarily based in the creation of harmonic function patterns without discernible rhythm; tonality contexts may be provided by an external source (Reese, 2007)

**Tonality** - patterns of whole steps and half steps as determined by the resting tone, for example a do resting tone signifies major tonality and a re resting tone signifies dorian tonality (Gordon, 2013)

**Vocable** - a sound, syllable, or word used when performing music without lyrics; often a nonsense syllable such as *la, ba, or da*

**Vocalization** - music or speech sounds created by mouth structures and vocal chords
APPENDIX B

IRB APPROVAL LETTER

UNIVERSITY OF
SOUTH CAROLINA

OFFICE OF RESEARCH COMPLIANCE

INSTITUTIONAL REVIEW BOARD FOR HUMAN RESEARCH
DECLARATION of NOT RESEARCH

Kathleen Arrasmith
School of Music
Music Education
Columbia, SC 29208

Re: Pro00094886

Dear Ms. Kathleen Arrasmith:

This is to certify that research study entitled *An Investigation of Five-Year-Old Children's Vocal Music Improvisations* was reviewed on 10/8/2019 by the Office of Research Compliance, which is an administrative office that supports the University of South Carolina Institutional Review Board (USC IRB). The Office of Research Compliance, on behalf of the Institutional Review Board, has determined that the referenced research study is not subject to the Protection of Human Subject Regulations in accordance with the Code of Federal Regulations 45 CFR 46 et. seq.
No further oversight by the USC IRB is required. However, the investigator should inform the Office of Research Compliance prior to making any substantive changes in the research methods, as this may alter the status of the project and require another review.

If you have questions, contact Lisa M. Johnson at lisaj@mailbox.sc.edu or (803) 777-6670.

Sincerely,

Lisa M. Johnson
ORC Assistant Director and IRB Manager
Dear Parents and Guardians:

I am a Ph.D. candidate in music education at the University of South Carolina. I am currently conducting research for use in my dissertation project entitled *An Investigation of Kindergarten Children’s Vocal Music Improvisations*. The purpose of this study is to increase understanding of young children’s vocal music improvisation experiences, the music characteristics of their improvisations, the way they interact with their peers and their music teacher, and the ways their music teacher supports their music development and improvisations. By completing this research project, I intend to provide information that may help music educators recognize the music characteristics of their students’ vocal music improvisations and enhance their students’ music development, understanding, and ownership.

Their music teacher, Ms. Vanessa Caswell, and I will collaborate to create enriching improvisation experiences designed to help develop your child’s music development, understanding, and performance skills. I will video record music classes every Thursday between January 23rd and May 14th. Additionally, I will ask some children to wear a small digital audio recorder during music class in order to record their individual vocal music improvisations. Some children may be asked to participate in short interviews with Ms. Caswell and myself throughout the semester.

Your child’s participation in this study is completely voluntary. The information gained from your child will be stored securely to ensure confidentiality. I will also use pseudonyms to protect your child’s identity. At any time during the study, you may discontinue your child’s participation without prejudice. The School of Music at the University of South Carolina is eager to ensure that all research participants are treated in a fair and respectful manner. Should you have any questions about this research, please contact me at 607-661-3388. You may also contact Dr. Wendy Valerio, my dissertation adviser, at 803-777-5382.

I greatly look forward to the opportunity to work with the St. Peter’s Catholic School community again this semester. As a former music teacher at St. Peter’s, I appreciate your commitment to your child’s education and to their music development. Please return the attached form to your child’s classroom teacher by Thursday, January 23, 2020.

Sincerely,

Kathleen Arrasmith, Ph.D. Candidate
USC School of Music
607-661-3388
kathleen.arrasmith@gmail.com

Wendy Valerio, Ph.D.
Professor of Music Education
803-777-5382
wvalerio@mozart.sc.edu
Please return this form to your child’s classroom teacher by January 23, 2020.

_______ I agree for my child to participate in the research study *An Investigation of Kindergarten Children’s Vocal Music Improvisations*. I have read, understand, and agree to comply with the information outlined in the accompanying letter of informed consent.

_______ I do not agree for my child to participate in the research study *An Investigation of Kindergarten Children’s Vocal Music Improvisations*. I understand that my child will participate in music class but that he/she will not have any of his/her information included in the resulting dissertation.

_____________________________  __________________________
Child’s Name                     Child’s Birth Date

_____________________________  __________________________
Name of Parent(s) or Guardian(s)  Today’s Date

_____________________________  __________________________
Telephone Number                 Email Address

_____________________________
Signature of Parent(s) or Guardian(s)
APPENDIX D

THINK-ALOUD INTERVIEW PROTOCOL

- Watch clips from iPad videos
  - Melodic over functional harmony
  - Free improv
  - Structured tonal
- Prompts
  - Tell me about...
  - What did you...
- Guiding questions
  - What is your definition of improvisation?
  - Why do you think improvisation is important for your students?
  - Tell me about the kinds of music experiences you thought were important for the students.
  - Tell me about the kinds of music improvisation experiences you thought were important for the students.
  - Why did you do these types of improvisations?
  - Tell me what you thought about when you created the experiences.
  - Tell me what you thought about in the moment when the children were improvising. When you were improvising? When everyone was improvising?
  - How did you encourage children to improvise?
  - How did you establish and cultivate a culture of improvisation?
  - Tell me about the social behaviors you reinforced.
  - Tell me about the social music behaviors you reinforced.
APPENDIX E

VIDEO-CUED INTERVIEW PROTOCOL

- Watch iPad footage from January 23, 2020
  - Participants watch and take notes
  - Participants watch, pause the video at will, and discuss what they see and hear
  - Participants answer questions about the video
    - What do you think about the videos?
    - What do you think about the improvisations?
    - What did you notice or find interesting?
    - What was challenging?
    - What behaviors did you see from the teacher?
    - What behaviors did you see from the circled students?
    - What sounds did you hear?
    - What procedures/structures did you see?
    - If you were the teacher or researcher, what would you pay attention to?
      - Is there anything else you think I should ask?

- Watch Garmin 360° video from February 20, 2020
  - Participants watch and take notes
  - Participants watch, pause the video at will, and discuss what they see and hear
  - Participants answer questions about the video
    - What do you think about the videos?
    - What do you think about the improvisations?
    - What did you notice or find interesting?
    - What was challenging?
    - What behaviors did you see from the teacher?
    - What behaviors did you see from the circled students?
    - What sounds did you hear?
    - What procedures/structures did you see?
    - If you were the teacher or researcher, what would you pay attention to?
      - Is there anything else you think I should ask?
- Listen to audio clips from February 20, 2020, February 27, 2020, and March 5, 2020. *denotes clips of interest.
  - Participants listen to the clips one or more times each and discuss what they hear
    - February 20, 2020 audio clips
      - 2m22s Mx. Beetes
      - 2m44s Mx. Beetes
      - 2m22s Leah
      - 3m09s Leah*
      - 4m03s Leah
      - 4m20s Naomi*
      - 4m20s Leah
    - February 27, 2020 audio clips
      - 4m15s Mx. Beetes
      - 4m15s Miguel
    - March 5, 2020 audio clips
      - 0m50s Mx. Beetes
      - 2m44s Mx. Beetes
      - 3m06s Mx. Beetes
      - 4m07s Miguel
      - 5m28s Miguel*
      - 2m44s Dominique
      - 3m06s Dominique
      - 3m36s Dominique
      - 4m07s Dominique
      - 6m21s Dominique*
      - 5m05s Naomi*
      - 7m55s Naomi*
  - Participants answer questions about the audio clips
    - What did you think about the audio clips?
    - What do you think about the improvisations?
    - What did you notice or find interesting?
    - What was challenging?
    - What did you hear from the teacher?
    - What did you hear from the students?
    - How did the sounds of the teacher and the students compare?
    - How did the sounds of each student compare to his/herself?
    - If you were the teacher or researcher, what would you pay attention to?
    - Is there anything else you think I should ask?
APPENDIX F

MUSIC TRANSCRIPTION PILOT STUDY EXAMPLE
APPENDIX G

PROCESS AND IN VIVO CODING CHART EXCERPT

1.23.20 - Ukulele Improvisation - Major Duple

<table>
<thead>
<tr>
<th>Start Time</th>
<th>In Vivo Codes</th>
<th>Process Codes</th>
</tr>
</thead>
</table>
| 0:00       | “Hello, Mrs. Ukulele! How are you today?” | Mx. Beetes: Singing in major duple, Sitting with students (on knees), Strumming ukulele to punctuate singing, Strumming vigorously on ukulele to emphasize sustained low note, Waving to students, Waving to ukulele, Pretending Mrs. Ukulele is alive, Looking around circle of seated students, Pointing to self, Repeating student’s volunteered answer, Shaking head, Leaning forward toward students on her right. Leah: Sitting with straight spine in circle, Putting fingers near face, Smiling at friend, Adjusting position in circle at direction of friend, Touching mouth and nose, Not repeating Mx. Beetes’ sounds, Laughing when other students laugh at low “good”, Looking toward Mx. Beetes’ general direction. Miguel: Making a raspberry sounds with lips, Sitting on knees in circle, Fidgeting (rocking back and forth, twisting arms, throwing upper body toward the ground), Yawning, Looking at Mx. Beetes, Looking around circle at other students, Not repeating Mx. Beetes’ sounds. Naomi: Looking at Mx. Beetes, Sitting on knees in circle, Waving arms above head and shaking head side to side while Mx. Beetes sings (dance-like), Still while Mx. Beetes sings, Repeating Mx. Beetes’ sung greetings, Watching intently while Mx. Beetes sings, Raising hand at end of section, Turning gaze rapidly from one student to another. Dominique: Sitting criss-cross in a relaxed position (supporting upper body with arms at side), Looking at Mx. Beetes while she sings, Nodding head to one side while repeating Mx. Beetes’ sounds, Looking at friend sitting next to her while repeating Mx. Beetes’ sounds, Smiling at friend, Looking back at Mx. Beetes’ when she starts singing again, Imitating Mx. Beetes’ facial expression and posture when repeating Mx. Beetes'.
<table>
<thead>
<tr>
<th>Start Time</th>
<th>In Vivo Codes</th>
<th>Process Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mx. Beetes</td>
</tr>
<tr>
<td></td>
<td>Me</td>
<td>Changing posture when repeating student’s volunteered answer</td>
</tr>
<tr>
<td></td>
<td>Me</td>
<td>Making an expressive face (serious brow, firm lip position, chin tucked back and down)</td>
</tr>
<tr>
<td>0:20</td>
<td>“How are you today?”</td>
<td>Leaning toward students on far side of circle</td>
</tr>
<tr>
<td></td>
<td>“How are you today?”</td>
<td>Singing “How are you today?”</td>
</tr>
<tr>
<td></td>
<td>“How are you today?”</td>
<td>Holding, not playing, ukulele</td>
</tr>
<tr>
<td></td>
<td>“How are you today?”</td>
<td>Scanning circle after singing</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Playing ukulele to punctuate students’ repetition on “day”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Looking toward Miguel when he chants “Good! Good! Good!”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Repeating Miguel’s “Good! Good! Good!”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Sitting back on heels, bending elbows,</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Sitting on knees with hands in her lap</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Looking at Mx. Beetes</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Looking at Mx. Beetes</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Repeating “How are you today?”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Nodding head on “day”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Looking away from Mx. Beetes and toward center of circle</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Taking a breath and starting to repeat “Good! Good! Good!”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Leaning forward and looking at Mx. Beetes</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Pounding hand on floor and shaking head to beat while chanting “Good! Good! Good! Good!”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Pounding floor once when Mx. Beetes repeats “Good! Good! Good! Good!”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Sitting back on knees when students repeat Mx. Beetes</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Looking at Mx. Beetes and keeping hand raised as Mx. Beetes sings “How are you today?”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Looking quickly toward Miguel when he finishes chanting “Good! Good! Good! Good!”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Looking back at Mx. Beetes, hand still raised</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Lowering hand before repeating Mx. Beetes</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Moving spine and arms with sustained and sudden movement while repeating “Good! Good! Good! Good!”</td>
</tr>
<tr>
<td></td>
<td>“Good! Good! Good!”</td>
<td>Bouncing spine, shoulders, and head while repeating “Good! Good! Good!”</td>
</tr>
<tr>
<td>Start Time</td>
<td>In Vivo Codes</td>
<td>Process Codes</td>
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<tr>
<td></td>
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<td>Mx. Beetes</td>
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<td></td>
<td></td>
<td>Leah</td>
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<td></td>
<td></td>
<td>Miguel</td>
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<td></td>
<td></td>
<td>Naomi</td>
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<td></td>
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<td>Dominique</td>
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<tr>
<td>0:30</td>
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<td>moving arms</td>
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<td>briefly</td>
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<td>to-”</td>
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<td>• Smiling</td>
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<td>arms with</td>
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<td>motion</td>
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<td>Beetes</td>
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<td>• Looking</td>
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<td>up at end</td>
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<td></td>
<td>of Mx.</td>
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<td>Beetes’</td>
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<td>• Smiling</td>
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<td>and back</td>
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<td>Sweet!”</td>
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</tbody>
</table>

183
<table>
<thead>
<tr>
<th>Start Time</th>
<th>In Vivo Codes</th>
<th>Process Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mx. Beetes</td>
<td>Leah</td>
</tr>
<tr>
<td></td>
<td>Miguel</td>
<td>Naomi</td>
</tr>
<tr>
<td></td>
<td>Dominique</td>
<td></td>
</tr>
<tr>
<td>0:38</td>
<td>side of legs and right hip • Looking around circle at students</td>
<td>Sweet! Sweet! Sweet!” • Looking around circle as students repeat “Sweet! Sweet! Sweet! Sweet!”</td>
</tr>
</tbody>
</table>

- Changing energy by singing “How are you today” quietly and slowly
- Strumming I V I to punctuation how are you today?
- Leaning toward students and looking around circle
- Looking at individuals when they make a sound
- Turning attention toward Bradley when he makes sounds
- Adopting an interested expression
- Using Bradley’s sound to improvise a descending dominant phrase
- Gesturing
- Looking at Mx. Beetes briefly
- Singing part of “How are you today” at the same time as Mx. Beetes
- Furrowing eyebrows
- Looking toward center of circle
- Touching fingers to mouth while other students make sounds
- Swinging arms
- Singing “hey!” as Mx. Beetes sings “How are you today?”
- Dropping smile and gazing at Mx. Beetes
- Calling out “Yahhhh yah!”
- Standing on knees and bringing arms in a wide backward circle above head
- Sitting back on knees and looking around circle with neutral expression
- Looking in Mx. Beetes’ direction
- Laughing when other students begin to laugh
- Adjusting sitting position
- Laughing when other students begin to laugh
- Shaking head while laughing
- Looking back at Mx. Beetes with smile on her face
- Making sounds quietly with a large smile on her face
- Adjusting sitting position
- Laughing when other students begin to laugh
- Shaking head while laughing
- Looking at Mx. Beetes with smile and head tilted
- Waving hands in front of her face and singing “yaww!” on 4th
- Looking at and leaning toward friend
- Looking back at Mx. Beetes
- Laughing when other students begin to laugh
- Looking at and leaning toward friend
## 1.23.20 - Ukulele Improvisation - Major Duple

<table>
<thead>
<tr>
<th>Time</th>
<th>In Vivo Codes</th>
<th>Process Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mx. Beetes</td>
<td>Leah</td>
</tr>
<tr>
<td></td>
<td>arms downward and lightly shaking head while singing the descending dominant phrase</td>
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</tr>
<tr>
<td></td>
<td>Strumming the ukulele vigorously while singing the descending dominant phrase</td>
<td></td>
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<tr>
<td>0:54</td>
<td>Singing “Hello, Mrs. Ukulele”</td>
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<tr>
<td></td>
<td>Strumming I to punctuate “hello”</td>
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<tr>
<td></td>
<td>Looking around circle at students</td>
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<tr>
<td></td>
<td>Waving at students</td>
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<tr>
<td></td>
<td>Looking at Miguel with blank expression and stiffening back when he makes a loud sustained sound</td>
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<tr>
<td></td>
<td>Looking away abruptly and not repeating Miguel’s sound</td>
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<tr>
<td></td>
<td>Sitting very still on her knees</td>
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<td></td>
<td>Looking toward center of circle</td>
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<tr>
<td></td>
<td>Keeping fingers near mouth</td>
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<td></td>
<td>Smiling slightly when a friend leans in toward her face</td>
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<td></td>
<td>Sitting very still on his knees</td>
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<td></td>
<td>Looking at Mx. Beetes with open mouth</td>
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<td></td>
<td>Making a long, sustained sound with cracking voice</td>
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<td>Standing on knees and raising arms upward</td>
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<td>Sitting back on knees</td>
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<tr>
<td></td>
<td>Looking at Mx. Beetes with half-smile on his face</td>
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<tr>
<td></td>
<td>Patting hands on knees and shaking head with a smile on her face</td>
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<td></td>
<td>Sitting still and criss-cross</td>
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<tr>
<td></td>
<td>Looking at Mx. Beetes</td>
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<tr>
<td></td>
<td>Repeating “Hello, Mrs. Ukulele”</td>
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<tr>
<td></td>
<td>Scrunching shoulders and shaking head at Miguel’s sound</td>
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<td></td>
<td>Looking at Miguel sharply</td>
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<td></td>
<td>Calling out “stop it!” to Miguel</td>
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<tr>
<td></td>
<td>Leaning to the side, smiling coyly, and waving while Mx. Beetes sings</td>
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<tr>
<td></td>
<td>Looking at friend while smiling coyly and waving</td>
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<tr>
<td></td>
<td>Repeating part of “Hello, Mrs. Ukulele”</td>
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<tr>
<td></td>
<td>Smiling at friend</td>
<td></td>
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<td></td>
<td>Looking toward Miguel and smiling less as he finishes his sound</td>
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<td></td>
<td>Looking back toward Mx. Beetes</td>
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<tr>
<td>MB Reflection</td>
<td>11-12</td>
<td>We have been working to build a sense of a safe community in the classroom. I am less likely than other teachers to reprimand my students if they are off task -- off task in that they are not responding to how I modeled. The students are more exploratory and somewhat disruptive at times, but I believe that leads to more children willing to insert their musical ideas. They may initially do that to get a laugh out of their classmates, but they I can redirect the response into something more musically relevant.</td>
</tr>
<tr>
<td>MB Reflection</td>
<td>12</td>
<td>But maybe there is going to be more independence the next time we do something like this</td>
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<tr>
<td>MB Reflection</td>
<td>13</td>
<td>But they may catch on if we end up with the same activity next week</td>
</tr>
<tr>
<td>MB Reflection</td>
<td>14</td>
<td>The usual structure we have during these jam sessions is 1) they listen to the progression 2) I model the improvisation 3) they audiate their improvisation 4) they perform as a group 5) individuals volunteer to sing their improvisation.</td>
</tr>
<tr>
<td>Vignette</td>
<td>20</td>
<td>Hello, Mrs. Ukulele How are you today? Let’s listen to how Mrs. Ukulele sounds.</td>
</tr>
<tr>
<td>Vignette</td>
<td>20</td>
<td>Hello, Mrs. Ukulele How are you today? Let’s listen to how Mrs. Ukulele sounds.</td>
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| Vignette 1.23 | 21    | Turn on your listening ears  
Turn down your talking  
If you want, you can close your eyes  
Mrs. Ukulele sounds pretty good today!  
I'm going to sing something with her  
Listen to Mrs. Ukulele. Here I sing  
It's my turn.  
In your head, think of a different song. Think of your own song  
Here you audiate | Echoing student’s volunteered vocalizations  
Echoing teacher’s echo | IV  | “Turn on your listening ears. Turn down your talking.”  
IV  | “I’m going to sing something with her. Listen to Mrs. Ukulele. Here I sing.”  
IV  | “It’s my turn.”  
IV  | “In your head, think of a different song. Think of your own song. Here you audiate.”  
Des  | Speaking directions to modify student behaviors  
Des  | Modeling improvisation for students  
Des  | Modeling silent audiation for students  
Des  | Singing directions to explain teacher model |
| MB Interview | 62–63 | I would agree with that. I think they had established this playfulness when it came to when we would start and stop something. And it indicated to them that this was a shared space rather than, uh, my space that they were being invited into. But I- it just felt like as we were creating that music they had taken ownership from me, and I felt like I was responding more than anything else. And that they were making the rules, and I was following them (laughs). While giving them a structure around their game. | Playfulness  
Shared space  
Students have ownership and teacher responds  
Students made rules and teacher gives structure | IV  | “They had established this playfulness”  
IV  | “Shared space”  
IV  | “They were making the rules, and I was following them.”  
Des  | Teacher looked to student ideas, playfulness, and behavior to provide structure for shared space and music games |
| MB Interview | 63    | I think something that you might not have thought about, unless you were in my head, and I know that you would intuitively do this too, as a teacher, those improvisational things I find are a way to… It sounds like they are making the kids… more chaotic? But… I felt like I had all of  
Sounds chaotic but felt like teacher had students’ attention  
Students feel seen and heard → paying attention | Des  | What others might see as chaotic, the
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<tbody>
<tr>
<td>DG</td>
<td>89</td>
<td>their attention whether or not they were quiet (laughs) while I had their attention. And that is a teacher tool that I used a lot with especially with smaller kids, is by taking their ideas… allowed me to really capture their attention, because they felt seen and heard. And when people feel like they’re seen and heard, they tend to pay attention more. And that was something, especially with, I remember some of those kids… They needed to have themselves seen and heard (laughs) quite a bit.</td>
<td>Teacher felt she had all students’ attention</td>
<td>Des</td>
<td></td>
<td>Teacher captured attention by using students’ music ideas</td>
<td>Des</td>
</tr>
<tr>
<td>DG</td>
<td>89</td>
<td>I notice that the… teacher… encourages noises of all kind. Um. I notice that she validates the noises of the students and encourages them to imitate other students’ noises. Um. I notice that she, uh, validates, um, student choice in gesture, posture, and affect</td>
<td>Teacher encourages noises Validates and encourages students to imitate other students’ noises Student choice in gesture, posture, and affect</td>
<td>IV</td>
<td></td>
<td>“The teacher encourages noises of all kind.”</td>
<td>IV</td>
</tr>
<tr>
<td>DG</td>
<td>90</td>
<td>She’s not setting, uh, consistently, she’s not setting expectations for what they are doing while… making the noises ….</td>
<td>Not setting consistent expectations for noises</td>
<td>IV</td>
<td></td>
<td>“Not consistently setting expectations”</td>
<td>IV</td>
</tr>
<tr>
<td>DG</td>
<td>90</td>
<td>She makes eye contact. She imitates their sound… she has the other students make that sound</td>
<td>Eye contact, teacher imitates, students imitate</td>
<td>Des</td>
<td></td>
<td>Teacher uses body language and imitation to engage students</td>
<td></td>
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<td>DG</td>
<td>90</td>
<td>she repeats a student and then the students repeat her. And there’s not a direct… direct instruction at that moment, but perhaps a culture has evolved. Yeah, it’s not an explicit instruction</td>
<td>No explicit instruction Perhaps culture has evolved</td>
<td>IV</td>
<td></td>
<td>“Not an explicit instruction”</td>
<td>IV</td>
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<tr>
<td>DG</td>
<td>90</td>
<td>the students are initiating play activities that they want to do. They said “it’s nighttime” so I’m assuming that they wanted to play Ni Nah Noh or something like that. … And then somebody said “let’s make soup” so I think that they are want- tey are</td>
<td>Students initiating play activities “It’s nighttime” → pretend to go to sleep “Let’s make some soup”</td>
<td>IV</td>
<td></td>
<td>“Perhaps a culture has evolved”</td>
<td>Des</td>
</tr>
<tr>
<td>MD</td>
<td>117</td>
<td></td>
<td></td>
<td>IV</td>
<td></td>
<td>“The students are initiating play activities that they want to do.”</td>
<td>IV</td>
</tr>
<tr>
<td>MD</td>
<td>117</td>
<td></td>
<td></td>
<td>IV</td>
<td></td>
<td>“They are requesting certain musical activities that they like”</td>
<td></td>
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<tr>
<td>MD</td>
<td>117</td>
<td>Teacher did a good job of honoring the sounds that were happening but then also redirecting to get a more…more of what she wanted</td>
<td>Teacher honored sounds from students Redirected to get sounds she wanted</td>
<td>IV</td>
<td>IV</td>
<td></td>
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<tr>
<td>MD</td>
<td>117</td>
<td>I think she wanted singing improvisation … I think she wanted melodic improvisation</td>
<td>Teacher wanted singing responses and melodic improvisation</td>
<td>IV</td>
<td>IV</td>
<td></td>
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<tr>
<td>MD</td>
<td>118</td>
<td>still honoring those students who weren’t quite, um, ready to improvise with melody yet. Um. Also, I thought it was interesting the students who were not ready to do it by themselves, she offered to do it with them. … they are more inclined to try to mimic what she was singing when she was singing with them</td>
<td>Teacher honored all sounds Improvised with students not ready to sing on their own → students mimicked teacher</td>
<td>IV</td>
<td>IV</td>
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<tr>
<td>JF</td>
<td>142</td>
<td>I’m not really sure why Naomi said it was nighttime… I mean, maybe it was because she had them close their eyes, or maybe she heard something in the music that gave her sort of this feeling that it was nighttime</td>
<td>Why did Naomi say nighttime? Because eyes closed? Something in the music?</td>
<td>Des</td>
<td>Student requesting play scenario</td>
<td></td>
<td></td>
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<tr>
<td>JF</td>
<td>142</td>
<td>Well, I think that she was having them close their eyes so they could really just eliminate any distractors besides just what they were hearing. Um, which is kind of nice so that then they’re not necessarily focusing on, like, what are their friends doing, or how their friends are moving or anything, and all they’re doing is just listening to that sound</td>
<td>“I think she would have them close their eyes so they could really just eliminate any distractors besides just what they were hearing.” Not focusing on others’ movements or actions</td>
<td>IV</td>
<td>“She was having them close their eyes so they could really just eliminate any distractors besides just what they were hearing.”</td>
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Teacher using subtle suggestions to guide student behavior and engagement
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| JF Interview | 142  | she started singing- the teacher started singing her little melody line, and then she paused and- when the kids were singing along- and she was like “my turn.” So I noticed that she corrected them that first time, but then there were still a few of them that were kind of singing along with her a little bit, but after she had already kind of corrected that behavior. And I noticed that she didn’t really stop to correct it again. So I’m wondering if maybe that- she was kind of accepting that, like, they were beginning to improvise a little bit with her? And so she was kind of ok with them joining in eventually | Able to focus on sound | Teacher asked students to shop singing with her once  
Did not stop them again  
Accepted they would sing with her? | IV | “After she had already corrected that behavior [students singing when they were supposed to listen], she didn’t really stop to correct it again. Lack of explicit instruction | Des | Minimal reinforcement of behavior expectations |
APPENDIX I

SERVE AND RETURN MUSIC INTERACTION TRANSCRIPTION

Mx. Beetes:      Class: (Slows slightly, ending at different times)

Hello, Mrs. ukulele

Hello, Mrs. ukulele

How are you today?  How are you today?

Miguel:          Mx. Beetes:       Miguel:

Good          Good    Ooo

How are you today? Class:  How are you today?

Mx. Beetes:      Class:

Good!  Good!  Good!  Good!  Good!  Good!  Good!  Good!  Good!
Mx. Beetes: How are you to-day?  
Naomi: Sweet! Sweet! Sweet! Sweet!

Mx. Beetes: Sweet! Sweet! Sweet! Sweet! Sweet! Sweet! Sweet! Sweet!  
Class: D A D

How are you to-day?  
Yah-na-na-naaa!

Mx. Beetes: Hel-lo Mrs. U-ku-le-le.  
Class: Hel-lo, Mrs. U-ku-le-le.

Miguel: Yah!  
Mx. Beetes: How are you to-day?  
Class: Cacophony of sound

Mx. Beetes: How are you to-day?
Naomi:  
Mx. Beetes:  
**Class:**

Mx. Beetes:  
Let’s listen to how Mrs. Ukulele sounds.

**Good!**

**Mx. Beetes:**

**Turn on your listening ears.**

**All:**  
**Zzzzzhuuuup!**

**Mx. Beetes:**

**Turn down your talking.**

Mx. Beetes:  
If you want, you can close your eyes!

Mx. Beetes:  
Pop! Pop!  
Open your eyes!
APPENDIX J

VIGNETTE THREE MUSIC TRANSCRIPTION

Mx. Beetes

Naomi's turn! Here she sings!

Naomi

Yah yah yah yah yah. Yah yah yah yah yah.


All

Mx. Beetes

Miguel


Here he sings. Bee _ buh bee boo boo boo buh _ buh bah, Buh

194
boo bee bih bih buh bee buh bruh. Bee bih bih bih bih buh bee bih burh.

buh buh buh buh buh buh buh buh buh buh buh. Bee bih bih.

All

Mx. Beetes
Do you want another turn? Ok!
This is our last one!

Hoo! Hah! Hoo!

Mx. Beetes

Nao - mi, Rea - dy! Here she sings!

Naomi

Bah bah bah bah _ Bah bah bah bah

D D C D

La la la la la _ La la la la la _ la _